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Older South Island Landholders and Their Land-Use Decisions

A thesis presented in partial fulfilment of the requirements for the degree of

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Abstract

Relatively little is known about the decisions and practices of rural landowners in Aotearoa/New Zealand and how they are influenced by ageing in later life. This research explored the land-use practices of twelve older land-holders in three rural regions in New Zealand's South Island. The research was intended to discover if older rural land-holders had made any changes to their land-use over time and if so, the motivations and reasons behind these changes. To understand the role of ageing in land-use decisions, the research examined the values and meanings held by these older people in relation to their rural environments and investigated the possibilities and challenges associated with choices in continuing to manage, stay on, or leave their properties.

A mixed methods approach was taken for the research, employing one-on-one, semi-structured interviews and photo elicitation with participants on their properties. Thematic analysis was used to analyse the data. Key themes that emerged were drivers of land-use change, attachment to place, interests and passions, reflection about ageing and future plans.

The analysis revealed that the experiences of the twelve participants could be divided into two groups, which reflected shared patterns of land-uses and their reasons for these. Differences related to those who had inherited familial properties or others who had purchased them as individuals. Economic objectives appeared as the main driver for inherited owners across their working lifespan on these properties, whereas for purchasers of properties, the pursuit of a diverse range of personal interests, as well as economics, were significant drivers of land-use decisions. However, nature conservation and protection initiatives were on the minds of all participants at the time of being interviewed. Some had engaged in these activities to a greater extent than others, especially in the latter years of their property tenures. Growing older had caused them to become more philosophical about life and the prospect of retirement. Being in stable enough economic situations provided an opportunity for participants to reflect on their landscapes and consider possibilities of pursuing ideas with environmental care and nature restoration initiatives.

Attachment/affinity to landscape was a significant theme, which influenced the meanings and values participants brought to their properties. This also influenced their decision making with respect to retirement, having strong feelings about attachments to place made ideas regarding retirement challenging, whether to leave or remain in place.

This research has demonstrated that economic imperatives dominated and drove intensive land-use decisions and patterns for these rural landowners during much of their working lives. However, a combination of financial stability in later life, a deep affinity with the place in which they dwelt and worked, and recognition of the effects of ageing, has provided these older landowners with options as well as possibilities for maintaining connections with the land and landscapes they were attached to. These included embarking on diversification and/ or conservation,

which followed personal interests and beliefs, finding ways to stay on or have input into properties while reducing equity or workload, or moving off farm, but dwelling locally to retain connections to landscape and the community.

In sum, this thesis has explored the diverse perspectives of a group of twelve older, South Island, rural landholders. The analysis of interviews and photo-elicitation revealed the significant connection between land-use, livelihoods and ageing identities. Personal relationships, economic influences and motivations and a deep sense of attachment to place all contributed to land-use decisions, with the importance and impacts of these factors changing over time as landowners aged.

Preface

Embarking on a Masters thesis was a natural progression from over 20 years of extramural geography studies at Massey University. I was excited to have the opportunity to develop the academic skills I had learnt over the years, learn new skills and meet interesting rural dwellers, something I had opportunity to do through my working life.

I have always had a liking for the outdoors and have taken an active interest in what is there, especially the interaction between its people and the natural world. My work experience saw me briefly working indoors, until I followed my passion for the wilderness outside. A long career in nature-based tourism in the Outback of Australia, North Queensland's rainforests, the Kimberleys, Western Australia and New Zealand national parks, has given me valuable experience with many aspects of rural life, which has helped inform this thesis.

Rural land-use and the people involved in working there are a key part of New Zealand's culture, identity and sense of place. Though this thesis has been a huge and at times, challenging task, I am hopeful my research will bring new understandings of rural landscapes and an appreciation of the people who inhabit them.

Acknowledgements

Professor Michael Roche and Professor Juliana Mansvelt, thank you for your unstinting support throughout the years. Quite literally, your role as mentors, advisors and sounding boards has allowed me to complete my thesis through challenging times. You both have my upmost respect and gratitude.

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I owe a debt of true appreciation to my twelve participants, who generously gave up their time to share their life experiences and the places they call home to help me develop this thesis. The journey of exploring those participants' worlds has been enlightening and thoroughly enjoyable.

Patricia, my wife, I cannot thank enough for her unwavering support she gave throughout my thesis endeavours. Her inspiration, love and care have helped me immensely through all of the good times and in moments of uncertainty.

Finally, thank you to Mack, our beloved dog, who always sat by my side as I worked on this thesis, almost to the very end.

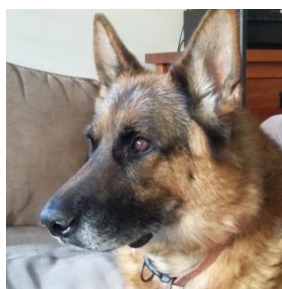


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Chapter One – Introduction



Figure 1. Banks Peninsula - Agricultural land-use 2021.

Photo: J. Knox

1.1 Introduction

This thesis explores the lives and associated land-use of twelve, ageing, rural landholders in three New Zealand, South Island regions of Banks Peninsula, the Canterbury Plains and High-Country, as well as Central Otago. The aim of the research was to investigate whether older, rural landholders were changing land-use on their properties and whether ageing was influencing their current and future activities and plans. This involved examining land-use practices and patterns and the values and meanings rural landholders attached to their landscapes

The thesis research is informed by a critical, human ecology approach, which would suggest that lives lived in rural areas evolve over time in interaction with specific social and spatial contexts (Keating, 2008). This means that rural landholders' decisions and experiences will be understood in the context of social/cultural and political economic dimensions of the places they inhabit. In turn, the integration of these perspectives will benefit the appreciation of landholders' interactions with their rural environments. Atchley's (1989) continuity theory of normal ageing will be used as a means to understand the land-use decisions. Atchley (1989) maintains that in making adaptive choices, older adults

try to preserve and keep existing internal and external structures ensuring continuity between past rural lived experiences and their current social world.

1.2 Background to the study

My interest in this topic stems from my 'lived experience' of rural workplaces over the last three decades. I was involved with nature-based tourism mainly in the rural Outback and Wet Tropics of Queensland, Australia and more recently throughout the South Island of New Zealand.

I have noticed over time, gradual changes occurring to the landscapes in New Zealand from outcomes of various social, economic and environmental drivers. While working in these areas, I also had opportunities to interact with the local landowners and became fascinated with the choices they made with land-use on their properties. I developed long-term relationships with many of these people and was intrigued by how they often reassessed what was important for them and the sense they made of the environments they lived in. This and my reading on historical land-use patterns in rural New Zealand led me to reflect on the ways in which landholders have shaped the environments in which they live and how rural contexts in turn, shape the lives of older people.

From reading about some of the key social and economic changes that have impacted rural land-use occurring over the last three decades in Canterbury, Otago and Banks Peninsula, I have identified several of those changes that will form the context of my research. Some of these key changes include, agricultural land-use intensification, diversification and nature conservation/preservation initiatives. These changes align in part with the national land-use trajectory of New Zealand's agricultural land-use phases (Molloy, 1980).

Anecdotal conversations with older landholders and my preliminary reading of texts, that include historic geographies for Otago (Olssen, 1984), Canterbury (Cant, 2001; Peden, 2011) and Banks Peninsula (Ogilvie, 2007), indicated several important points to be examined, including aspects of the various historic phases of land-use changes in those regions. Over the course of older landholders' lives there have been a number of political, economic and social changes which have influenced their land-use decisions; for example, the process of the Canterbury High-Country tenure reviews between the government and landholders. This 'reversion' of land-use as it was described by Pawson et al. (2008) focused on reallocation of land to add to the conservation estate by exchanging and free-holding land for pastures. Other noticeable changes occurring over the last two decades are in terms of intensive rural irrigation and a growth in nature conservation activities by property owners.

Looking critically at what research has been done so far in relation to rural land-use and its relationship to ageing; what is known has tended to be written about mostly in overseas rural contexts. A small amount of research has been undertaken in New Zealand. For instance, Pomeroy (2015) has investigated the

resilience and coping strategies of several North Island farmers faced with adverse economic and environmental impacts. Wiles et al. (2011) have examined experiencing place, ageing and wellbeing on Waiheke Island. Perkins et al. (2015) carried out research on a differentiated countryside in relation to land-use changes taking place on a wider scale in Central Otago. Important as this research may be, what we do not know, is what is happening with land-use change and ageing in rural places on an individual basis. Supporting this finding, Macleod et al. (2006) maintain that drivers of land-use changes are poorly understood, and their impacts on biodiversity conservation in farmed landscapes cannot be discerned from the national indicators currently being monitored.

Although research overseas about land-use and rural ageing has been carried out by Keating (2008) in Canada, Kang et al. (2012) in the USA, by Holmes (2008) in Australia and Riley et al. (2007) in the UK, it was all written in the contexts of quite different social and physical geographies to those in New Zealand. My thesis will interpret decision making and experiences of older rural property dwellers in the context of change affecting New Zealand agricultural production and land-use. This will inform and add to the understanding of older rural dwellers in often challenging environments. I will pursue the qualitative line of enquiry, as this method is capable of highlighting participants' experiences, meanings and understandings of people and place relationships. I will also be taking an innovative approach with a method of research called photo-elicitation, using photos taken by participants. Photo elicitation is a method of eliciting alternate ways of seeing and understanding an image, thus invoking deep discussion of values and meaning (Hay, 2016).

1.3 Purpose – Key research questions

This research expands existing research on how older people have shaped and been shaped by the lands they occupy, by understanding older people as active agents of land-use change. The thesis also endeavours to connect literature on 'older rural dwellers', 'landholders' and 'drivers of land-use change'.

Three key questions that informed the research were:

- Have older rural land-holders changed land-use on their properties over time? (Why/why not)
- What rationales and motivations underpinned rural landholder's land-use over time?
- How does ageing and the values and meanings of older rural land-holders associated with place, impact on their current and future land-use and livelihood decisions?

1.4 Overview of thesis

The thesis structure is set out into eight chapters as follows.

Chapter One: The introduction has presented the thesis topic, provided the context for the research and the rationale for the research study. Three research questions were identified.

Chapter Two: The literature review introduces the socio-ecological approach which underpins the research. I then introduce literature on rural geographies and research that has been conducted on rural land-use overseas and in New Zealand, outlining the key landscape transformation phases from a developmental perspective. An examination of work on gerontological geography follows with an emphasis on understanding rural ageing with a view to extending our understanding of the intersections of rural people and places across the adult life span. The continuity theory of Atchley (1989) is discussed in section 2.9 and the chapter concludes by highlighting the connections between landscapes and rural identities and the ways in which climate, distance and rural culture have shaped the everyday lives of older adults.

Chapter Three: The 'Methods' chapter describes and explains the research design. This includes the rural spaces in which the research took place, processes of and details of the qualitative semi-structured interviewing processes and photo elicitation techniques. A description of the thematic analysis and coding process for data derived from the interviews and photo elicitation is also provided. Discussion of the ethical procedures, as well as my reflection on the conduction of the research, including the analytic narrative in relation to existing literature completes the chapter.

Chapter Four: Land-use over time for rural landholders. In chapter four, I will be addressing the first of the key research questions of how and why older landholders may have changed land-use on their properties over time. Here the four themes of land-use expansion, diversification, intensification and nature conservation will be examined

Chapter Five: The context of land-use change over the course of the 20th Century. Chapter five addresses the other two key research questions by examining the drivers and deeper motivations that underpin any land-use decisions and activities. It then explores how and whether place affinities and attachments have influences on those decisions.

Chapter Six: Perspectives on Ageing in the Rural Environment. Chapter six examines the participants' personal attachment to place and looks at what sorts of values and meanings they ascribe to their immediate landscapes. These attachments are discussed in the context of current and future land-use decisions and choices, most specifically by investigating any challenges of remaining in place and the opportunities for achieving continuity in the future.

Chapter Seven: Discussion. In chapter seven I seek to outline the findings of participants' key matters of interest related to the research questions. Then, I discuss what I have learnt from their land-use changes, motivations for change, place attachment and continuity plans. In addition, I probe deeper into their emotional attachments and what those actually mean for any decisions being made. I also show how many of the outcomes of my research questions align with and/or contribute to existing academic literature.

Chapter Eight - Conclusion. In the conclusion chapter, I consider what has emerged from the analysis and discuss my understandings of the twelve participant's responses to the research questions. I will discuss implications of the research and how I have made sense of the findings about older rural land-holders and their land-use changes and how their attachment to place has been closely connected to the changes that they have instigated on their land over the years of their tenures. Also observing, the longer that they have held their land, the greater the attachment has become and processes of making changes have increased their belonging, as well as stewardship with the land. In concluding, I discuss the significance of what I have found out overall and signal the contribution of difference that my research could make in the field of rural ageing and rural geographies.

Chapter Two – Rural Ageing and Land-Use in New Zealand.

A Literature Review.

2.1 Introduction.

The literature review will address specific areas of research in order to understand the perspectives of older landowners' land-use over the course of involvement with their properties. Initially, I will outline patterns of rural land-use decisions that have taken place from the late 1800s and the early 2000s in the South Island of New Zealand. Then, I will focus on older rural people in New Zealand; examining their social and spatial contexts, as well as the nature of their environments. Finally, I will look at what geographers have written about land-use and aspects of rural ageing.

2.2 Historical landscapes – Landscape change.

Both Māori and Europeans changed the ecology of the land over time. Māori burnt a significant amount of the bush, often to make hunting birds such as the Moa easier (Peden, 2008). Johnston (1969) notes although Māori ranged widely in the South Island, their modification of the natural environment was marked only in a few specific areas, sourcing building timber from forests and cultivating vegetable gardens. Europeans cleared native bush and burnt dry tussock grassland to create land suitable for farming and obtain building timber to use and sell (Simpson, 2021). Since the arrival of European settlers in the early 1800s, a variety of land-use changes have taken place across New Zealand's landscape. About a century and a half ago, European settlers deliberately set out to convert the landscapes of Southern New Zealand for both agriculture and settlements (Holland, 2013). Diverse landscapes of the South Island, which the first generation of European settlers came to, were commonly viewed as a 'mélange of high mountains, steep slopes, and broad plains' (Holland, 2013:13). 'People from Europe migrated across the world for promises of a better way of life in New Zealand, a chance to own one's land, be one's boss and tame the wilderness into productive land' (Bell, 1997:145). 'Sheep dominated the farming industry of the South Island through what was known as the 'pastoral era' of the late 1800s and beyond' (Peden, 2011:167). In half a century from 1850, 'New Zealand experienced possibly the most rapid virgin landscape transformation of any nation, with 25 percent of our total land area cleared of lowland indigenous forests' (Molloy et al., 2007:22). After the establishment of European settlement in the 1850s, the subsequent expansion of agriculture across the landscape in New Zealand coincided with large scale changes following the Industrial Revolution. This resulted in colonial markets being created for agricultural products (Stephens,

1966). The advent of refrigerated shipping made it possible for the opening up of new overseas markets. New Zealand was then seen as a farm for Britain. An example of this description saw the British government start purchasing New Zealand's entire output of frozen meat in 1915, to help ensure a regular flow of food to the British public and the British Expeditionary Force in France (McLean et al., 2016).

During the late nineteenth century, New Zealand farm magazines and newspapers rarely used the words 'conservation' and 'nature' (Holland, 2013). However, the growing scale of current land-use change, through agricultural intensification with dairying across New Zealand, is now under the spotlight. For example, the rural dairy industry 'is experiencing political and commercial pressures to improve its environmental performance on one hand, while maintaining economic efficiency and commercial competitiveness in a global market place on the other' (Jay, 2007:266). A mosaic of different intensified agricultural land-uses across the landscape is now raising public concern for the environment of New Zealand. One reason suggested is that 'Intensification is an ongoing and accelerating process which potentially threatens the environment, biodiversity and even the sustainability of agricultural production' (Moller et al., 2008:253). Adding to that view Flannery (2019:324) maintains that for some reason, 'In frontier lands such as New Zealand, societies and individuals who can monopolize the greatest bounty on the land, regardless of waste or environmental consequences are selected as fittest'. Simpson (2021:43) commented that land-use in New Zealand with both European and Māori cultures now 'has emerged from early exploitive phases with a conservation ethic'. Grey (1994:229) also holds a similar view, that in the lands of nineteenth-century settlement, particularly in New Zealand's case, 'Western instrumentalism was expressed in stripping the land of its valuables and encumbrances and converting it to the production of money income'.

2.3 Landscape transformation phases in New Zealand.

Molloy (1980) has identified five main phases of historic land-use across New Zealand connected with primary agricultural production. These phases are on the left side of the diagram Figure 2.1 seen from a developmental perspective. They include in their chronological order from the 1850s: colonisation, expansion, early intensification, diversification and later intensification in the early 2000s. The frequency of the land-use phase changes compressed in approximately the last 50 years. Since the 1990s, relentless agricultural intensification has been predominantly about increased inputs of water, fertilisers and livestock foods (MacLeod et al., 2006). Now the focus in the 2020s is mostly on the expansion of the dairy industry. Those types of land-use trends have altered direction over the last few decades with changes widespread, especially on the dry, rural landscapes of the Canterbury Plains and the McKenzie Country with intensification, through extensive irrigation, for dairying and stock. Some other outcomes of intensification

of this nature have seen the removal of many exotic tree woodlots, pine plantations and conifer tree wind-shelter belts.

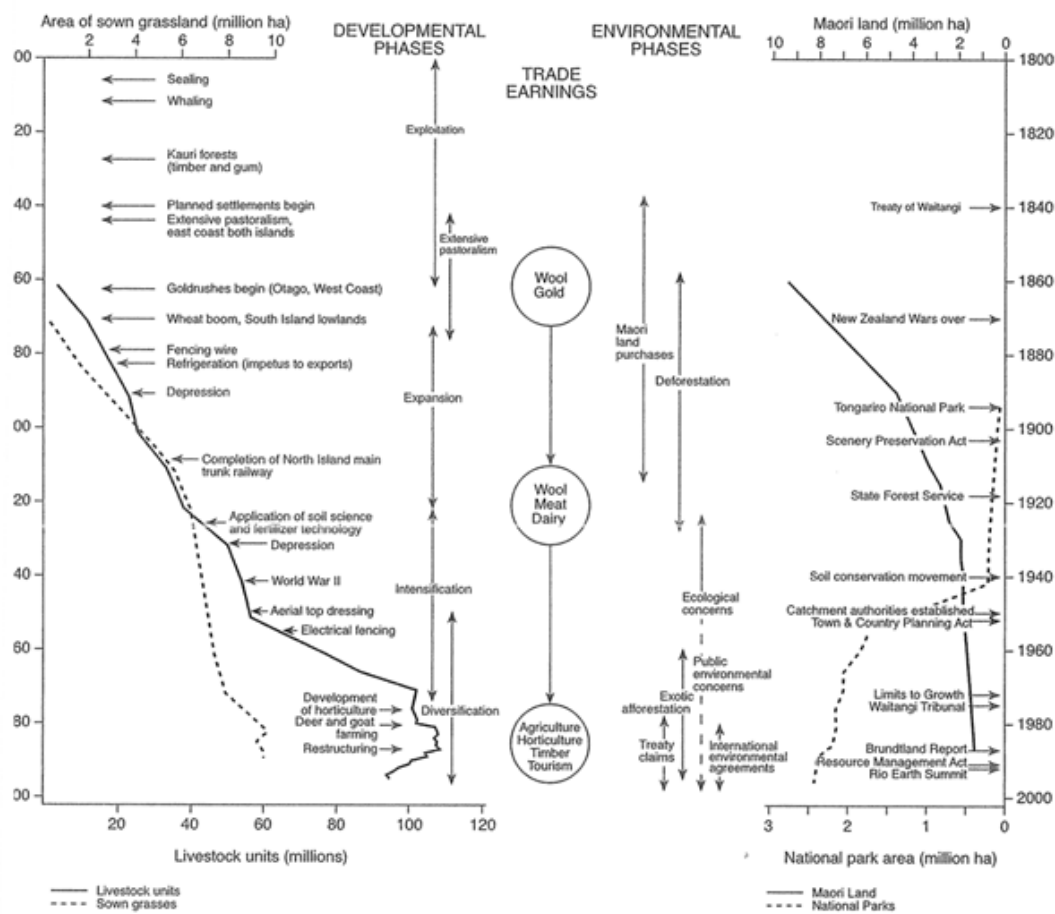


Figure 2.1 Landscape Transformations in New Zealand. Molloy (1980).

2.4 The five phases of New Zealand's land-uses.

First phase: 1820-1860. The initial 'exploitation' phase by early European settlers from the early 1800s until 1860 saw 'transformation of the lowland and low hill landscape of Southern New Zealand with pastures for sheep and cattle' (Holland, 2013:108). Economic potential at this time shaped the appreciation of the landscape by surveyors and exploring pastoralists looking for suitable places to farm, who whilst viewing the Canterbury Plains, 'were assessing the country for its value for farming or running livestock' (Peden, 2011:6). Fetzl et al. (2014) observed that this initial phase was dominated by interlinked processes. Initially there was the reduction of native forests and tussock grasslands and that followed with a strong growth of managed grassland on the Canterbury Plains. As an example, Banks Peninsula, which was heavily forested with native trees prior to

European settlement 'saw the clearance of native trees by first settlers in the area, in the mid 1800s across most of the landscape in order to accelerate progress and expansion of the farming industry' (Olgilvie, 2007:6). The focus of rural expansion was clearing native trees and bush for building timber, then making way for a monoculture of English grasses to be established on cleared land. The early grasses sown comprised mostly of Cocksfoot grass for seed production, predominantly for use in the development of new North Island pastures and for export to the United Kingdom (Johnston, 1969). Despite clearing native bush to create farmland, there was 'an official encouragement of afforestation (tree planting), which is in Canterbury's 1858 Planting of Trees Ordinance Act' (Grey, 1994:251). Grey (1994) argued that this was an early official attempt to encourage planting exotic trees to meet future timber requirements and apparently satisfy an accepted frontier misconception that planting trees also improved rainfall.

Second Phase: 1850 -1880. The 'extensive phase' which overlaps the earlier exploitation phase to the period was known as the 'pastoral era'. Sheep production increased at this time as pastoralists responded to changes in the better marketplace, in particular, the opening up of the frozen meat trade (Peden, 2011:131). 'By 1854 an estimated 100,000 sheep thrived in Canterbury and four years later more than half a million and by 1858 a quarter of a million grazed Otago tussock' (McLauchlan, 2020:59). In stark contrast to today's methods; the 1880's land-use change was quite extreme, as exemplified by the remarks of (Lady Barker, 1956:195), 'On the whole, I like burning the hillsides better than the swamp - you get a more satisfactory blaze with less trouble'. The results of that style of burning were later described by Lady Barker (1956:195) as 'vast tracts of perfectly black and barren country, looking desolate and hideous to a degree hardly to be imagined'. Many unfortunate outcomes of rapid land-use changes in the second half of this period took place, which included soil erosion, declining soil fertility and a prevalence of pests with introduced rabbits and weeds (Holland, 2013). In 1867, two crucial events opened the way to the expansion of wheat production on the plains of Canterbury: the railway from Ferrymead through Christchurch was extended to the Selwyn River and the robust 'colonial plough', which soon proved to be more than a match for the indigenous tussock, was imported and tested in Canterbury (Wynn et al., 2001:65).

An extensive phase of land-use in this period was caused by the discovery of gold in Otago and the Nelson-Westland regions, in the early 1860s. The gold rush boom period of approximately ten years attracted thousands of miners to the areas. Many came across to mine from the exhausted gold fields of Australia and California, USA, with some also coming from China. Stimulated by the demands of the gold rush in the 1860s, ploughed land in Canterbury was hastily developed to produce wheat to help feed the mining population in Otago (Grey, 1994). Olssen (1984) commented that out on the goldfields, very large tracts of land in the Clutha River's catchment were altered dramatically by mining sluicing techniques in the search for alluvial gold. These areas of gold producing land were changed from dry grassland and native scrub, as well as early sheep and cattle farmland, into scarred, bare-mined and sluiced-out landscapes (Foster, 1966).

Third Phase: 1870-1920. The phase of 'expansion' of agriculture, beginning in the late 1860s, brought about marked land-use changes across the South Island landscape. The tussock grasslands that covered much of the Canterbury Plains and High-Country were not easy to farm, so the first thing the pastoralists did was burn the country where possible. The practice of burning lasted nearly a century in the High-Country (Johnston, 1969). During that period, arable farms were developed on the plains from cleared, native, dry plains grassland (Meurk, 2008). Subdivision of individual properties, as a result of access to affordable fencing wire and boundary fencing, coincided at that time with the development of new railways and improved roads, giving better access to rural places. Detrimental economic consequences of the international wool price drop in the mid 1870s saw land-use change considerably after that period (Fetzel et al., 2014). A trend of land-use change from that point on moved in the direction of a mixed system of agriculture, focusing on meat products for export, which was aided by the advent of refrigerated shipping, enabling international markets to be readily accessed. By 1885, pastoral and agricultural land-use changed in order to 'seize linked opportunities created by the main branch railway lines constructed from North Canterbury through to Christchurch and Invercargill, as well as by the growing population' (Grey, 1994:290). Production of grain in Otago peaked in 1890 with 376,000 acres of oats (for horses) and 294 acres of wheat being harvested. At that time also, New Zealand had nearly an acre of grain growing per person living in the country (McLauchlan, 2020). Canterbury's extent of wheat barley and oats production from this period onwards saw it gaining the title of the 'Granary of New Zealand' (Barley, 1974:135).

Fourth phase: 1920-1950. The next 'intensification' phase of landscape transformation from the 1920s was initiated in part largely by the agents of organised agricultural research in New Zealand and the development of fertiliser technology (Molloy, 1980). At this time, management of land and production according to Pawson (2001:458) was 'modified in order to maintain or boost productivity'. Over-use of pastoral land created issues with soils as the mineral fertility of some areas of farmland throughout New Zealand had been slowly declining. That changed after the 1940s when the productive benefits of aerial topdressing with granulated superphosphate fertiliser and lime gained momentum. During (1966:12) commented that 'the war had created skilled pilots needed for this type of work and the simultaneous introduction of surface seeding of clovers, into deteriorating pastures, at that time proved successful'. As a result, more stock was able to be introduced onto what was once considered poor land. This land was later to be managed by aerial applications of poison baits for controlling rabbits, as well as addressing many types of pest plant concerns, such as gorse, by the spraying of insecticides, fungicides and weed killers by aircraft and by hand on the ground.

Fifth phase: 1950-2000. The last developmental phase being 'diversification' of land-use change identified by Molloy (1980) Figure 2.1 indicated that it occurred mostly from the 1970s. Diversification changes were made in response to 'ongoing intensification of the agricultural production of dairy beef and sheep' (MacLeod et al., 2006:212). The diversification trend of land-use change, which followed, was

made through the implementation of deer farming, forestry and horticulture, which included mostly stone fruits (apricots, peaches), apples, pears and viticulture. These changes of land-use were clearly made by farmers as an economic coping strategy in response to the Labour government's economic restructuring in the mid 1980s, when the 'time of a major shift in agri-economic policy that removed farm subsidies happened' (MacLeod et al., 2006:201). Diversification was seen as a means of finding other avenues of profitability on properties. This has led onto a variety of present day land-use changes occurring, with examples such as the production of olives, vegetables, specialty seeds, stock foods, flowers, as well as agricultural tourism associated with intensification of economic land-use production including horse riding, farm accommodation and sheep dog displays with shearing demonstrations.



Figure 2.2. Tourist sheep dog display - Otago.

Photo: J. Knox

2.5 Important land-use change events across the South Island.

New Zealand's rural history took a completely different direction from the 1980s as the dynamics of land-use altered when the political and economic climate New Zealand farmers had operated in, came to an end. This 'was largely as a result of the processes of macro-economic reforms and agricultural deregulation with such moves as the taking away of government farm subsidies' (Johnsen, 2008:25). The New Zealand Labour government's policy of deregulation in the mid-1980s saw land-use impacts, which were varied, often depending on each land owner's financial situation at the start of the downturn. Farming practices and farmers'

attitudes changed, but only because of deregulation (Wilson, 1994). About the time of the removal of state subsidies and other government agricultural assistance initiatives, by a stroke of fate, this event coincided with adverse climatic conditions happening which included serious Canterbury drought conditions (Cloke et al., 1990:20). Coping strategies undertaken by farmers since that period have seen strong and steady trends for agricultural intensification and some diversification (MacLeod et al., 2006). Examples of intensification taking place are increasing stock rates, more fertiliser usage and conversion to more intensive forms of agriculture such as dairying. Diversification also has included shifting from sheep and beef farming, into deer farming and large-scale forestry. Pawson et al. (2008:95) argued that 'with land-use changes, a need is also required to consider the wider political economy of the process, as well as the cultural concept of 'improvement' that framed it'. That concept will be discussed further in the land-use section of the literature review.

Three rural regions in the South Island (see Figure 2.3), which are the areas for the basis of my thesis research, have undergone large scale patterns of historic land-use change over the last 150 years. These regions include, Otago, Canterbury (Plains, Down lands and High-Country) as well as Banks Peninsula. They are important, because these three regions are where my twelve participants were drawn from. However, the unevenness of the land-use changes occurring in these regions has not always completely followed historic land-use change trajectories experienced across the rest of New Zealand. These changes will be outlined in the next section on regions.



Figure 2.3. Three Thesis Research Regions of the South Island.

Otago.

The historic land-use changes across the landscape of Otago, like elsewhere in early New Zealand during mid 1800s settlement, was where ‘individuals and companies leap-frogged deeper and deeper inland, in search of unoccupied land for sheep farming’ (Olssen, 1984:52). This initial landscape transformation of exploitation aligns to the New Zealand land-use developmental phase’s trajectory (Molloy, 1980) illustrated in Figure 2.1. However, one difference in land-use change in Otago, compared to other parts of the South Island, was caused by the discovery of gold in the 1860s, which suddenly transformed significant areas of the landscape, especially in catchments of rivers. Thousands of miners rushed to the Otago gold diggings, soon making it the wealthiest part of New Zealand (Olssen, 1984). Miners and prospectors had neither time or interest in long term farming exploits with the land, as they were mainly focused on the short term quick gains of finding gold (Wynn et al., 2001). The gold rush only lasted for about ten years,

(Heinz, 1952). Now in the 2000s, sheep, horticulture, including viticulture, as well as tourism prevail as the key land-uses in this region. In relation to viticulture 'it is important to note that the Central Otago wine region is the most recent example of a series of globalised production regimes that have been located in this part of New Zealand' (Perkins, et al., 2015:85).

Banks Peninsula.

Whilst Māori settlement caused some changes in the vegetation of Banks Peninsula often by burning. Wilson (2008:259) commented 'it was not nearly as abrupt or catastrophic as the impact of European settlement'. Extensive removal of native vegetation of predominantly native hardwood trees from the 1850s, by early European settlers until the mid 1900s, saw over 140,000 acres of forest removed, leaving only a few patches in total of less than 150 acres (Gair, 1966). The following three maps, Figures 2.4, 2.5, 2.6, illustrate the severity and stages of Banks Peninsula forest clearance over approximately 100 years.

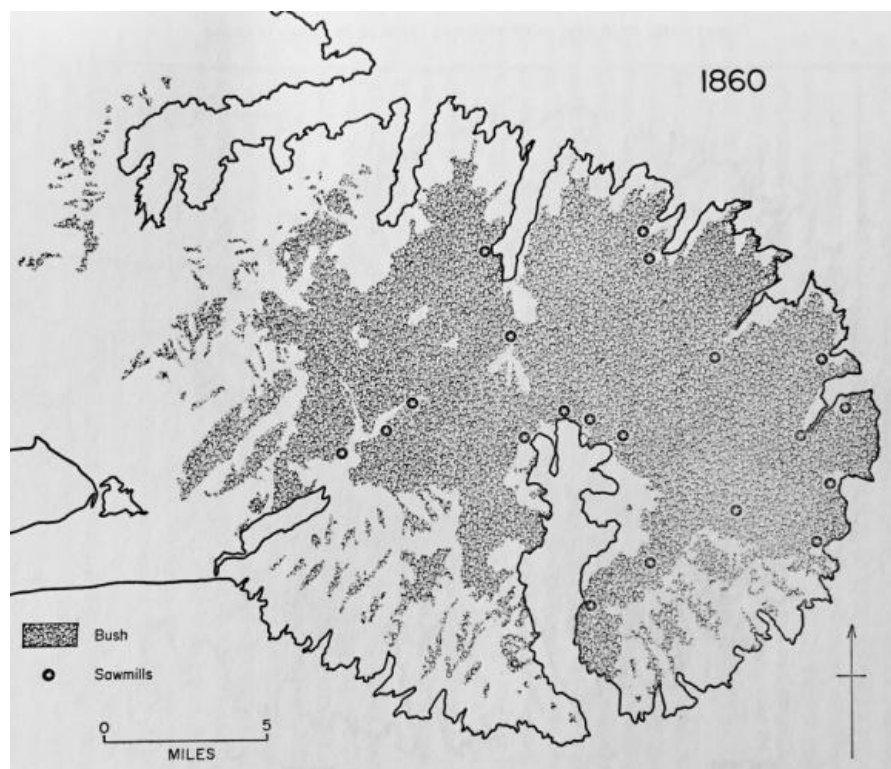


Figure 2.4. The forest of Banks Peninsula about 1860 (Johnston, 1969).

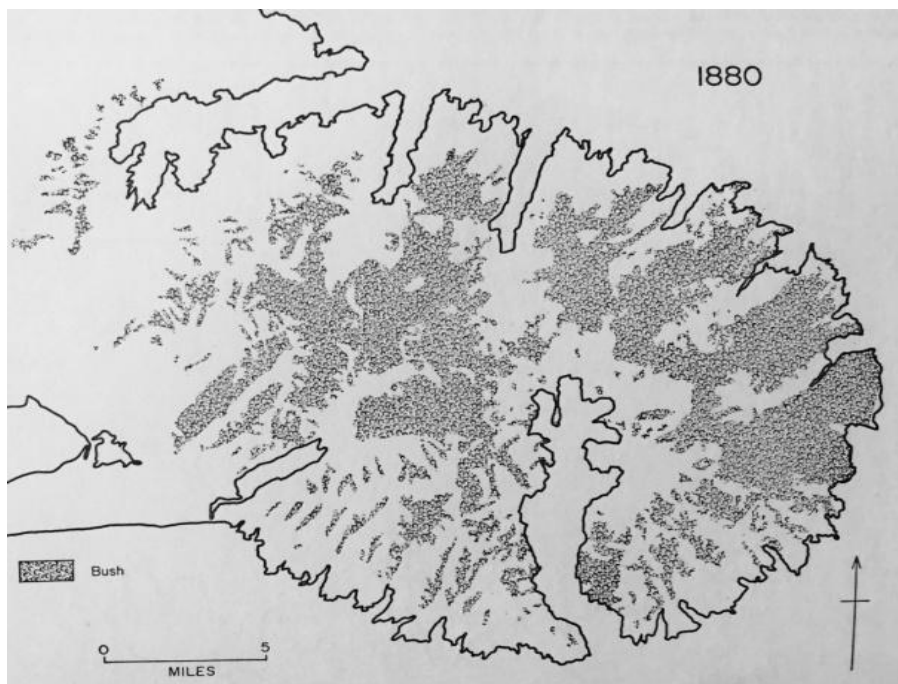


Figure 2.5. The forest of Banks Peninsula about 1880 (Johnston, 1969)

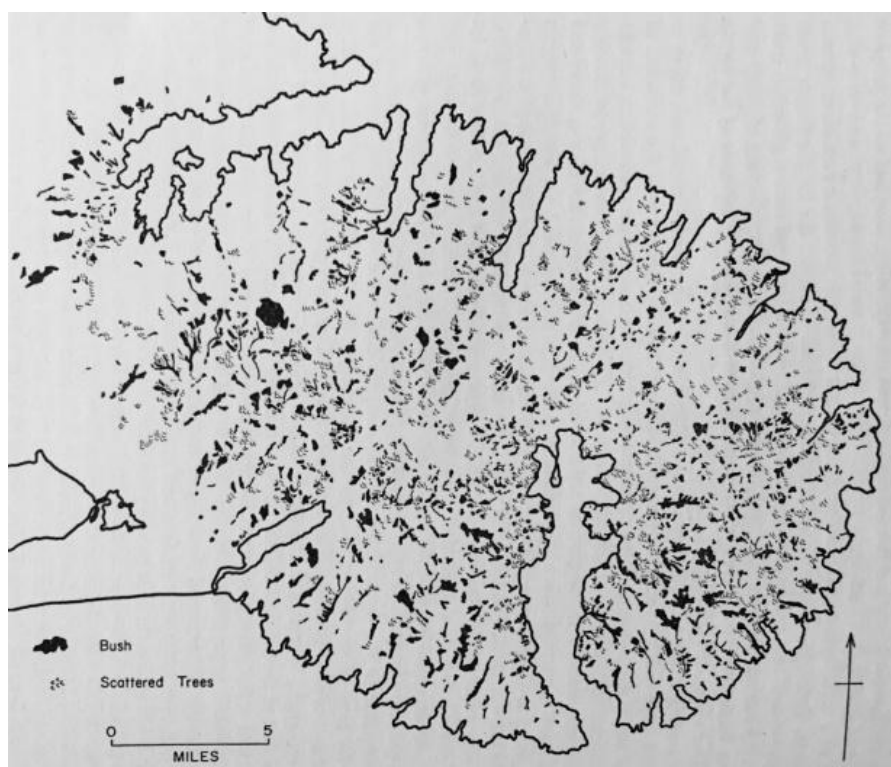


Figure 2.6. The forest of Banks Peninsula based on aerial photographs from 1950 (Johnston, 1969)

After forest clearing, the establishment of new pastures and the introduction of sheep and cattle on Banks Peninsula in the late 1800s had similarities with former native bush-land land-use changes of the North Island (Johnston, 1969). Prior to this, there are also accounts that early French settlers in the region produced barley and wheat near the settlement of Akaroa, in the 1840s (Ogilvie, 2007). The first Canterbury grapes were brought into Akaroa by the French settlers in 1840 and descendants of the Chasselas variety of grapes are still grown today at French Farm (Beaven, 2001). In 1844, shore based whalers who had been working out from Banks Peninsula had struggled with the declining numbers of whales so turned their hand to farming and imported hundreds of horses to raise with cattle and sheep (McLauchlan,2020). From the late 1800s on Banks Peninsula, the dominant expansion of land-use change was growing introduced Cocksfoot grass for seed production, until about the 1930s. That expansion phase of land-use was followed with the continuation of sheep and cattle, as well as several dairy farms which supplied milk to small Banks Peninsula dairy factories. Of interest, currently all of these dairy factories have now closed, except for the small Barry's Bay cheese factory.



Figure 2.7. Remnants of 1860s Totara forests on Banks Peninsula, cleared by early pioneers to create farmland.
Photo: J. Knox

Presently on Banks Peninsula, land-use activities, although dominated by sheep and cattle, have diversified considerably. In several places there is a range of new land-uses in suitable areas, such as protected valleys. These include eucalypt and pine forestry, horticulture and viticulture, as well as market gardening in valleys close to Christchurch; for example the Horotane Valley. Currently there are several productive olive groves of around 600 trees in each, which were planted out over sheep country at Little Akaloa, Takamatua and Robinsons Bay. These

were developed for boutique olive oil production in the early 1990s (Beaven, 2001). In conjunction with other diverse land-uses on Banks Peninsula, such as Alpacas at French Farm and flowers at Duvauchelle, there are various forms of farm tourism happening today, including private hiking trails and tourist accommodation (Olgilvie, 2007).



Figure 2.8. Olive grove at Takamatua - Banks Peninsula 2021.

Photo: J. Knox

Canterbury Plains, Down lands and High-Country.

The Canterbury Plains were changed from an uncultivated, treeless, unfenced expanse of yellowy tussock from the 1860s, to a settled area of arable and pasture land in the space of about 50 years (Barley, 1974). That change of exploitation and extensive pastoralism aligned with the trajectory of developmental phases in (see Fig 2.1) New Zealand's Landscape Transformation diagram (Molloy, 1980). (Johnston, 1969:80) reiterated this point, remarking that 'the land of Canterbury was quickly taken up, mainly in the form of extensive pastoral leases of several thousand acres and up to 100,000 acres in area'. Rapid development of farming on the Canterbury Plains from the 1870s was speeded up by the introduction of the double-furrow plough, which converted native tussock areas into paddocks of grain, root crops and English grasses. 'From the first twenty years of settlement it was the large estates of the Canterbury Plains that initially responded to the opportunities of bonanza wheat growing' (Grey, 1994:240).

To keep pace with land-use changes at the time 'the construction of a widespread system of water races allowed cultivation and settlement to spread onto higher and drier parts of the gravel plains' (McCaskill, 1966:300). During the early 1900s period, 'in tandem with pasture improvement, there was a shift from Merino sheep to coarse wool sheep' because of the Merino sheep's susceptibility to contracting

foot rot when confined to well watered paddocks (Pawson et al., 2008:53). Consequentially, other sheep breeds were imported from the United Kingdom to reduce foot rot issues and improve wool production. Suitable breeds of those new sheep imported, which could tolerate damp conditions included, English Leicester and Romney Marsh (Pawson et al., 2008).

Subsequent to early water drainage systems, in contrast, irrigation schemes were constructed from the early 1900s, drawing water from several braided rivers in Canterbury, including the Rangitata, Hurunui and Waimakariri Rivers. These water schemes gave reliability of water for stock and cropping to wide areas of shallow, gravelly land out on the plains. Where attempts to farm crops and livestock had continually failed because of the nature of porous gravels in certain places like the Eyrewell and Ashley regions, large state-owned pine forests were planted out from the 1930s, which could tolerate growing on poor, stony, dry land (McCaskill, 1966). Overall, the dominant feature of farming in Canterbury from the 1880s to the 1940s, was a continuity of what was being farmed and fine tuning of property owner's operations, rather than risking any change in land-use directions (Pawson et al., 2008:53). Continuation of traditional arable farming and intensifying with sheep and cropping, as well as diversification with forestry, deer farming and horticulture in Canterbury, changed land-use from the 1980s (Roche, 2001). These changes were made by the primary productive farm sectors as a response to political and economic outcomes in the mid 1980s, when farm subsidies were lifted and international markets for meat and wool collapsed. As a result, of the 1980's issues, activities for a wide range of land-use diversification in Canterbury were initiated.

Presently, intensified dairying on previous sheep and cropping land is the most dominant economics-based land-use change on the Canterbury Plains, which has been enabled through extensive irrigation. Over the last two decades, large-scale, irrigated horticulture, viticulture and dairying have mostly displaced mixed farming on small farming units and dry pine plantations. As an example, the boom period of dairy expansion on the Canterbury Plains from the early 1990s has seen an increase of 200,000 hectares of land-use change in the direction of dairying, enabled by irrigation from cheap supplies of water (McLauchlan, 2020). Consequentially, 'the cultural landscape has gradually come to reflect socio-economic, rather than environmental factors' (Meurk, 2008:225). Extensive land-use change in North Canterbury's sheep country began in the 1980s with viticulture in the Waipara Valley region of North Canterbury. This diversification was followed in the 1990s by large scale olive groves with several thousand trees being planted near Weka Pass (Beaven, 2001). In the Canterbury High-Country, grazing of sheep for wool production was the primary aim of the first European settlers, although it should be noted some did run cattle. Several decades ago High Country farms returning low meat and wool prices stimulated land-use diversification for economic gains in the direction of deer farming, forestry and tourism (Burrows et al., 2008). In further chapters, I will be exploring these land-use changes in more detail.



Figure 2.9. Canterbury Plains old water race and new 2000s pivot irrigation in 2021. Photo: J. Knox

2.6 Post productive landscapes.

The fast pace and complexity of recent change in rural land-use can be conceptualised as undergoing a multifunctional transition (Holmes, 2006). This concept of land-use is a variable mix of consumption and protection values. It has emerged as contesting the former dominance of production values, which led towards a greater complexity and heterogeneity in rural occupation at all levels. That transition is propelled by three dominant driving forces, namely: agricultural overcapacity, the emergence of market-driven amenity values and a growing societal awareness of environmental sustainability and preservation issues. Perkins (2006:254) commented that 'rural land in New Zealand and its associated lifestyles are centrally important commodity forms, arising from the process of rural land commodification'. He also suggests that significantly, land being the most basic of rural commodities and the lifestyles of the people, who live on it, are also subjected to a variety of material and symbolic forces. These forces are made apparent as the land is marketed, exchanged, subdivided, regulated, landscaped, ploughed, fertilised, planted out and built on.

Over the last three decades there have been considerable amounts of rural restructuring and connected changes to rural economies, people and places (Perkins, 2006). Several political factors instrumental in the rural land-use change since the 1980s, in New Zealand, include globalisation and neoliberal politics. Also, the intentional commodification of the countryside has changed it from a

place, purely intended for primary production, to one also being used for selling an ever-increasing array of non-traditional rural commodities, services and lifestyle products (Cloke, 2006). Other descriptive terms for these changes taking place have arisen. For example Marsden (1998), points out that drivers for land-use change create a 'differentiated countryside', which is made up of new hybrid and dynamic production, as well as consumption spaces. Contemporary changes to land-use from traditional primary production agriculture to intensification and diversification see those activities being described as a form of post-productivism. Beyond that description, it has gone further to what Mackay et al. (2019) suggests is 'super-productivism' of land-use, which refers to high input for increased yields of agricultural commodities.



Figure 2.10. Waimakariri River - Canterbury, 2021. Picture illustrates examples of diversification from sheep country into irrigated green pastures for dairying. Other land-uses include, pine forest plantations, horticulture and the encroachment onto rural primary productive farmland land by significant areas of lifestyle blocks of land with homes; some with horse racing training tracks.

Photo: J. Knox

Some of the continued rural land-use restructuring of the past two decades has seen increased commodification of rural landscapes with tourism activities and nature conservation/preservation initiatives. These activities in New Zealand are very much under the research spotlight to explore the rationale behind land-use changes of this nature. Rural tourism examples, such as accommodation, observation of farm activities with farm tourism, through to active adventures across the rural landscape, are commodities which can be described as forms of land-use diversification. Ollenburg et al. (2007:444) maintain that some motivations for having farm tourism, particularly for older farmers, are that it

creates a retirement income and sometimes gives social opportunities for them. Phillip et al. (2010) describe the relatively new concept of rural tourism activities as 'agri-tourism'. McGehee et al. (2004) comment that while a growing body of literature in agri-tourism development globally does exist, a great deal more focused and organised research is needed to understand this particular type of rural land-use for tourism purposes.

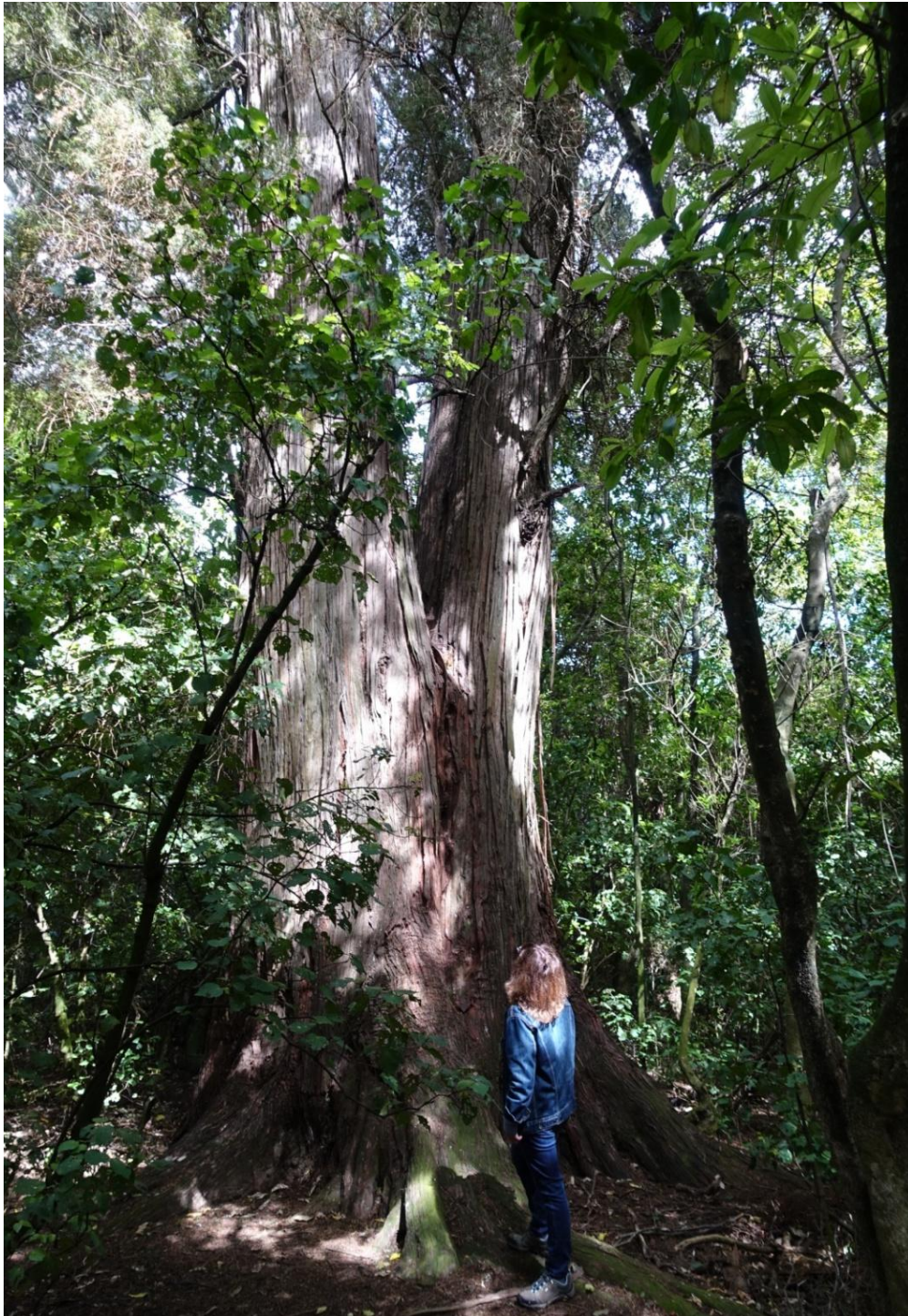


Figure 2.11. Tourist admiring one of the last original Totara trees remaining on Banks Peninsula at the Hay scenic reserve - Pigeon Bay. Photo: J. Knox

Moller et al. (2008:253) argue that 'intensification of New Zealand agricultural practices is an ongoing and accelerating process, which potentially threatens the environment and its biodiversity, as well as the sustainability of continued agricultural production'.

A noticeable land-use trend, occurring in recent decades is the incorporation of nature conservation/preservation measures alongside productive land-use activities by land-holders. Norton et al. (2000) maintain much of the focus of nature conservation in New Zealand and elsewhere, is on formerly protected natural areas. Some areas of conservation and preservation of native biodiversity in rural areas of New Zealand have been researched locally. Although, on a wider global scale, sustainability issues and diverse pathways to promote environmental performance among farmers is well documented, especially in Europe. Given that most farm-land biodiversity is in the hands and minds of farmers, Hammes et al. (2016) suggested that a better knowledge about the attitudes of farmers towards nature conservation and preservation initiatives still requires being addressed properly. In the South Island of New Zealand, attitudes and initiatives about nature conservation and preservation by individuals in their rural places, appears to have been sparsely documented.

While there have been many ingenious nature conservation and preservation initiatives on private land in New Zealand, there still appears to be an underlying feeling among conservationists that the only way to achieve nature preservation goals is to take land out of production and legally protect it in some manner (Norton et al., 2000). In some rural areas of New Zealand, a move away from complete primary production on farms has been made in recent years. This action is closely linked to a growing global trend in nature preservation and conservation initiatives, which are sometimes seen as a form of sustainability by those practising them. Increasing amounts of national land area from the mid 1900s, assessed not to be productively useable by the New Zealand Department of Conservation, were set aside for the purpose of environment preservation and recreation. Haggerty et al. (2009:776) hold the view that 'changes in farming practices come about, not only through market and ecological signals, but through what we might think of as subjective signals, via the construction of notions of good farming in particular fields'. Connected to land-use activity are land-holders' thoughts about aesthetic appreciation, personal philosophies and lifestyle choice. That could be described as the 'rural gentrification' of the countryside, which is quite common in New Zealand. This concept aligns with Phillips (2005:491) who observes that in the United Kingdom 'areas take on a symbolic identity of a gentrified space, which in turn becomes a commodity for recreational, retail and finance capital'.

2.7 Understanding ageing in rural places.

Although there has been research carried out on ageing in rural New Zealand, e.g. Wiles et al. (2017) or Bates et al. (2019), the majority of research has been conducted in Europe, North America, Canada and the USA. Research has also been conducted in Australia. For example Davies (2008:56) examined understanding the challenges of healthy, rural ageing in Australia. She suggests older people in rural communities become 'marginalised by longstanding misconceptions about rural life and urban-centric policies', which have gone unchallenged. Burholt et al. (2012) have explored the phenomenon of a predicted increase of older people in rural places in the global north, which includes Canada and the USA. They suggest that research on older people has mainly focused on medical and psychological issues, neglecting the issues surrounding participation of older rural people in rural places. MacKinney et al. (2019) examined features of ageing successfully in rural North America and outline rural healthcare providers' roles in this.

New Zealand's ageing population in rural areas has drawn a variety of research. For instance Keeling (2001) has looked at aspects of kinship and geographical distance in terms of the social context of older people in a small South Island town's community. Joseph et al. (1995) explored the interface between the perceptions of people growing old in New Zealand's rural communities and the objective impacts of economic and social restructuring on their communities. And Wiles et al. (2012) researched older people's understandings and experiences of their resilience in the face of being more vulnerable, socially and physically, as they aged. Often it appears research on ageing is more focused upon the understanding of urban dwellers and people living in country towns. Surprisingly, research has tended not to focus on individuals in rural environments. Some Australian research looked at issues surrounding older people's thoughts about Australian rural to urban migration. For example Winterton et al. (2012) have explored the consequences of rural population ageing in Victoria - Australia and the differences between those who have lived in the rural region all of their lives and those who have moved there more recently from cities. That research indicated how place attachment and dependence, as well as a sense of community, are important in fostering identity principles for older rural people.

Outcomes of research about the experiences of rural ageing have not always taken into consideration the contrasting environments in which people dwell. For example, Keating et al. (2011) provided substantial social research on rural ageing in the vast, rural environments of Canada, where older rural people's social differences and the effects of isolation, as well as remoteness, were inherent factors. In another example, while examining age-friendly social participation in two rural Australian communities, Winterton (2016) suggested that extreme distance between many remote towns was an important issue. From the aspect of Australia's extreme distances, where many rural towns are so far apart, she

considers they were not overly representative of the complexity of issues facing rural communities internationally. Consequentially, not too many comparisons from research findings on older rural people in the northern hemisphere and other continents, such as Australia, are overly relevant in New Zealand. In studying the diversity of rural ageing properly Keating (2008) commented there is a need to study it in the context of place and added that a one size fits all approach does not work. This connects with relevant comments made by Hennessy et al. (2021:205) who argued that the diversity of rurality, based on cultural, geographical and social contexts in which people are located, will influence their experiences of ageing in rural areas'. Supporting that view Chapman (2009:27) points out, 'to understand ageing well, one needs to study not only those who are ageing, but also the places within which, people are ageing'. Understanding the perspectives of people who are ageing in rural places is a key aspect of my thesis research.

Important priorities for research on ageing people identified in 1999 by the United Nations *International rural ageing project* (IRAP) include: life course perspectives, impact of technology, as well as intergenerational and other social relationships. Despite some research on older peoples' mobility, access to health services, age-friendly cities and communities, often in urban settings. Milbourne et al. (2014) have suggested there is a need to take more of an inclusive approach to ageing research. This requires the inclusion of rural dwellers in order to gain a balanced understanding of the life discourses and issues older people experience in place. There are many other challenges of ageing which are highlighted in rural places because of the impact of natural environments, distance and climate on the identities of rural people due to natural environments, distance and climate. That notion relates to Wiles et al. (2012:423) who suggested after examining the resilience of 121 older people in two rural New Zealand communities that 'we must pay adequate attention to the broader physical and social contexts and scales that underpin individual's resilience'.

2.8 Adaptation, place attachment in rural ageing.

For older rural people in general, place attachment gives them a sense of belonging, helps them develop a sense of autonomy and is an outcome of time spent in a place. Wiles et al. (2012) believes that for many older people, connections to people as well as the aesthetic and material qualities of their rural geographies, are motivators and a means for rural place attachment. Attachment to place is an expression of effective and positive person-to-place bonds, developed in those connections over time. It is also 'associated with feelings of safety and for older people in rural areas; it may operate differently from those in urban environments' (Wiles et al. 2021:176). Considering the interactions of older adults within the rural contexts that shape their life experiences Keating et al. (2008:1) comment that 'rural communities incorporate many elements of diversity, which influence lives of older adults'. Some of these diverse elements include the natural environment, availability to services and familial network connections. These are all elements which older, rural dwellers might develop an affinity to and

a sense of place attachment. These are also some of the facets which I will explore with respect to my participants' experiences.

The strength of effective attachment to the land by many rural landholders according to Baldwin et al. (2017:50) is simply, 'a love of the land and its constituent parts, including farm animals, wildlife and nature, as well as the time invested in hard work and learning about the place'. Freeman et al. (2019:1) support wellbeing benefits of nature by commenting 'a connection to nature is a lifelong process that is particularly valued by older adults'. As people get older, adjusting to any changes in situations and environments requires 'out-of-routine ways to deal with them, by proactively adapting to those changes' (Atchley, 1999:76). Older people may have strong emotional ties and social attachments to their rural neighbourhoods and consequently any changes can be quite difficult to make, when they have dwelt in a place for long periods. In turn, 'those aspects of attachment have served as a motivation to care for these rural places' (Wiles et al., 2013:99). Strong attachments and a desire to care for their communities are suggestive of the entwined nature of personal identity with the identity of places. Understanding older people familiar with an area, is often understood through their shared memories and situations (Phillips et al., 2011).

Through caring for their place, aspects of a person's identity may develop in relation to the environment around them as they age. This in turn contributes to older people's sense of place (Manzo, 2003). Similarly, in having noticeable place identity feelings Vanclay et al. (2008) identified that the idea of a sense of place is part of a person's 'synaesthetic' faculty, a term which describes people's combined personal inherent senses, imagination and purpose. In rural America, where one in four Americans live, aged 65 or older Anarde (2019:17) holds that older, rural people typically are longtime dwellers in the particular places they call home and they have 'invested in the character of those places and in the human connections they have developed and relied upon for years'. Sometimes older people assume new identities in the process of caring for their place and enhancing their sense of belonging. These new identities can be caretakers, guardians and advocates for the wellbeing of people and places in which they are ageing (Wiles et al., 2009).

Attachment to place can occur in other ways, such as through shared memories of events and situations around particular places and buildings (Phillips et al., 2011). Importantly Wiles et al. (2017:5) have identified that 'ageing, attachment to place and an ability to achieve that strong sense of place attachment is positively associated with measures of health and wellbeing'. From their earlier research of older people, in several rural areas of New Zealand Wiles et al. (2011:360) commented that 'the overarching message around ageing in place was that older people wanted to have choices about their living arrangements and access to services and amenities'. Accordingly, for older rural dwellers, having choices about living arrangements and lifestyles and access to services may be important as they grow older.

Older rural property owners may be faced with impending decisions to move from their property. With regards to making decisions about 'staying on' Joseph et al.

(1995:79) maintain that 'in the face of declining health and decreasing independence, older people's perception of the impact of restructuring their daily lives becomes caught up in longer-term assessments of the sustainability of their lives in place'. A rather unique view of the emotions surrounding attachment to place in old age, is where the description of an older family's trauma on having to leave their home and abandon their treasured possessions, is illustrated by Rowles (1983:299), who quotes a rather poignant line from John Steinbeck's novel, *The Grapes of Wrath*, (1939) 'How can we live without our lives? How will we know it's us, without our past?' Endorsing that illustration of a strong sense of attachment to place and its social ramifications Winterton (2012:329) suggests that 'place assumes greater significance for people as they age, due to increased reflection and reminiscence', noting 'ageing in rural places is beneficial in terms of identity maintenance, with differences between long term and more recent rural residents'. The idea of leaving home and possessions has been shown to be a significant source of trauma for some. For rural land owners, such decisions might be even more challenging in the context of well-developed attachments to their properties and landscapes developed through dwelling and land-use activity.

2.9 Continuity and active ageing.

Understanding the choices and experiences of older rural dwellers might be explained by continuity theory. According to Atchley (1989:183) the concept of continuity is 'about the making of adaptive choices'. Those choices are when middle aged and older adults adapt in order to preserve and maintain existing internal and external structures. External structures relate to the social arrangements people have created around them to meet their needs. Internal structures concern aspects of self consciousness, including self-confidence (Atchley, 1999). They also prefer to accomplish this objective of continuity by using strategies tied to their past experiences of themselves and their social worlds. Some of the strategies of their inner constructs include emotional resilience and personal goals, whereas for their outer constructs they are about lifestyle visions and social opportunities (Atchley, 1999).

The degree of continuity attributed by an individual to his or her life can be classified under several general categories. They are, too little continuity, where life seems unpredictable. Then, optimum continuity, where an individual sees changes being made in line with their personal preferences and coping strategies. And, too much continuity where 'an individual feels uncomfortably in a rut and not enough change for the better occurs for them' (Atchley, 1989:185). Davis et al.(2008:15) argue 'If continuity and meaning are important in understanding how people may age well, there is a need to be sensitive to the factors that give rise to discontinuities across their life-course and how they might be predicted, prevented or ameliorated'.

The concept of active ageing may also account for decisions and experiences of ageing in place. Understanding subjective aspects of active ageing according to

Stenner et al. (2010:468) suggest ageing people's physical, cognitive, psychological and social factors, do co-exist in complex combinations. According to Walker et al. (2012) active ageing is about having meaningful pursuits which include all older people and that these would be a preventative notion against ill-health, disability, dependency and loss of skills. They suggest that understanding any perceptions of active ageing in enhancing people's later life experiences, through good health and functioning well, will assist the work of gerontology researchers, policy makers and health professionals. However, for rural people, low critical mass, patterns of migration, limited infrastructure and services, urban-centric views and a marginalization of older rural people, make supporting healthy rural ageing a challenge for the future (Davis et al., 2008). Examining the continuity and active ageing life discourses of my rural participants is very relevant to this research topic. Continuity and active ageing may be significant with regards to decisions about staying on or leaving their properties. Then, there is the question of how, after those changes have been made, older people can continue to remain enthusiastic about the idea of growing older, either in their familiar place or in a different place.

The course of continuity in terms of maintaining physical or mental activities, or even social activities, will also mean that some options in later life become more attractive than others. The ageing of rural property owners, the issue of familial legacy, future land-use and succession planning for properties may also arise. Further questions also arise about whether the land stays in the family, continues in the same manner of land-use, or changes ownership with the possibility of any traditional generational land-use pattern altering after the land-holder eventually retires. 'Journeys of things (such as a farm) in and out of one's life can become important in the production of one's inter-subjective self and the temporal and social positioning of one's self within an individual's and other's life courses' (Mansvelt, 2012:12). For example, instead of leaving altogether, land-holders may retain a small role with helping out on the farm or even being involved in an advisory capacity with land-use decisions for any new owners. This sort of continuity stance made by 'maintaining a partial involvement with activities, relationships and environments, concentrates people's energies in familiar domains' (Atchley, 1999:11). It can often prevent or minimize the social, psychological and physical losses that cultural concepts of ageing might lead us to expect. Conclusions from research about family succession in one of the first studies in a New Zealand rural context show that farmers often display manager attitudes related to their personality and objectives (Nuthall et al., 2017). These are likely causes in part, for some familial succession difficulties, when land-owners are making decisions to step back from involvement with the land-use.

2.10 New Zealand rural ageing studies.

A number of research studies have focused on experiences of rural dwellers in New Zealand. For example, Bates et al. (2019) explored the unique experience of growing older on Waiheke Island. This study demonstrated how place can give

rise to uncertainties encountered by older people regarding access to services and to the social and community aspects of daily life on the island. It highlights the complex and variable nature of island life beyond the assumed romanticised island idyll. Wiles et al. (2013) have shed light in their research in New Zealand on the significant, yet often undervalued, role of older people, in contributing care to their communities. The findings of that study revealed that through activism, advocacy, volunteering and nurturing, older people can assume a variety of community care roles. That aspect highlighted the active nature of older people's involvement with care for place, emphasizing the important and different contributions they can give to their communities.

Research on rural change affecting elderly Māori by Chalmers et al. (1998:163) found that 'unlike indigenous New Zealand communities where Māori elders *'Kaumatua'* have acknowledged wisdom, as well as influence, the elderly in many rural places are not often seen as powerful'. In recent similar studies Butcher et al. (2016) commented that older Māori draw comfort through their close connection to the land, place and family. 'For Māori in particular, the land and topographic features are of deep significance in the effective glue that connects people to place' (Wiles et al., 2021:180). Rather than avoiding being reliant on others whilst seeking independence, older Māori conceptualized older age through autonomy and freedom to live in accordance with Māori values encapsulated by *'whakawhanaungatanga'* (a process of establishing relationships, relating well to people). Consequentially, feeling connected to and having a stake in how rural places change and evolve, may also be important in rural landowners' decisions about their lives. This sentiment speaks to several aspects of my own research topic by exploring the intersection of rural ageing and associated land-use changes over time by my participants. Importantly, my findings will provide further knowledge and understanding of this research topic and field of interest.

2.11 Conclusion.

Much has been documented about land-use changes in New Zealand, especially in the North Island with regard to land-use changes, landscape development and growth of agricultural production trajectories. However, less work has examined any land-use change initiatives, such as diversification away from the continuance of mainstream primary productive farming activities of sheep and dairying or nature conservation and preservation initiatives on private land. There is a need to explore the values and meanings, which older rural land-holders bring to their land-use in a South Island context. Little is known about how, why or whether their land-use has altered over time, or about the decisions they are making as they grow older. Although some work has been done on rural ageing in New Zealand, it has not fully explored what people are thinking about in terms of their land-use activities on their properties and about important decisions they have to make, in relation to staying on or leaving their land, as they age.

Examining many of these issues mentioned will help immensely, not only with furthering our understanding of older rural people's shared stories as they age, but also learning about any patterns or themes that may emerge from any of their land-use changes being made in New Zealand. Also, understanding the affinity and relationship that older people have to their rural land and how they recognise it as they have aged, could provide a clearer picture of the differences between them and their urban counterparts. Place makes a difference, because there are various social, political and economic relationships and the context in which rural people and farmers make decisions about their land-use have different imperatives. Those imperatives to explore may be associated with profitability and resources that might be available to help access markets, or their personal philosophies or standpoints towards either familial continuity or nature protection and conservation measures. Or, they may be related to changes generally associated with rural ageing.

In conclusion, the 'diversity among rural settings and in rural adults is immense' (Keating, 2008:129). These factors make this enquiry about ageing rural people and their associated land-use changes an important area for research. Understanding the diverse experiences of a group of land-holders and how land-use decisions are related to ageing is worthy of further exploration.



Figure 2.12. Retired botanist, the late Dr Eric Godley, OBE, admiring the Rangitata braided river and surrounding mountains in the Canterbury High Country. Photo: J. Knox

Chapter Three - Methodology and Methods



Figure 3.1. Participant interview field equipment

Photo: J. Knox

3.1 Introduction

This chapter outlines the research procedures and qualitative methods I used to investigate the experiences and decisions of a purposively selected group of twelve male rural property owners. The chapter begins with a discussion of my research context and selection of participants. An introduction to the semi-structured qualitative interview and the technique of photo-elicitation used to elicit information from participants is then outlined. The process of coding and analysing the data is also outlined. The chapter concludes with a reflection on critical reflexivity and the way in which I managed and reflected on my own positionality with respect to the research.

3.2 Regions and participant selection

The three rural regions I selected in the South Island were Otago, Canterbury and Banks Peninsula (see Figure 2.2). They were chosen because those places have diverse landscapes and differing agricultural land-uses.

My twelve older rural participants are from these regions and have been, or still are involved in farming and other rural pursuits connected with land-use changes. The participants were all known to me through my employment and in my personal life and selected purposefully on the basis that they covered a diverse range of land-uses and histories in terms of the longevity of their relationships with their landholding. The types of properties these twelve participants owned were varied. They included long-term generational farms, small personal interest lifestyle and hobby farms, diverse primary production farms and solely nature conservation and restoration properties. Beyond the personal connection I had with them, they were also chosen because they were all older rural landowners (aged 50-91) who were at various points in terms of relinquishing or reconfiguring their relationship to the properties they had farmed. Given these characteristics I felt the purposively selected participants would be appropriate to respond to questions about how and why land-use may have changed on their properties, to describe the affinity they held to their properties and to reflect how people-place relationships were configuring their choices about their land, its use and where to dwell in later years. Stratford et al. (2016) pointed out, that by conducting in-depth interviews with the right people; it will provide significant insights into a research issue.

Prior to recruiting my participants, I contacted them all by phone to ask if they were interested in being involved in my thesis research project. Then, if they agreed to participate, I posted to them an information sheet and a consent form (see Appendixes A and B) for their approval, which was to be signed and returned. Of interest, only one person declined from all of the requests I made, due to personal time constraints. Many of the participants expressed their enthusiasm for participating in my research project and the reasons for it. Some said they were keen to be involved, as it was a way of being recognised, or finally noticed. For others, it was a way to play a part in a research project about their isolated, sometimes forgotten, but as I saw it, important rural South Island environments which have undergone change.

However, a disadvantage of this familiarity with participants is that I needed to be careful in not assuming I understood their perspectives. As a consequence, I was mindful in interviews of reflecting critically on the conversation, asking questions about how and why things had occurred and checking with participants that I had the correct understanding.

3.3 Research processes

My research did involve asking the participants personal questions and discussing significant and important visual aspects they recognised, connected with their lives, as well as places. Prior to conducting the research, I discussed issues of informed consent, minimising harm, security of data privacy and confidentiality with my supervisors and submitted a 'Low Risk' Ethics Application to the Massey University Ethics Committee. (Approved 18/12/17). As part of the study, in the information sheet and the consent forms (see Appendix A and B) I made it clear

that I would endeavour to protect the anonymity of the informants and that pseudonyms would be used. This also had implications for the use of photos and any descriptions which could have identified my participants or their properties. I also ensured that only my supervisors and myself had access to the field notes and images, transcripts and recordings.

In considering the interactions of several older adults within the rural contexts which shaped their experiences, choices and associated land-use change, qualitative research methods were an appropriate choice. This is because, 'qualitative research is concerned with elucidating human environments and human experiences within a variety of conceptual frameworks' (Winchester et al., 2016:5). Semi-structured interviews and photo elicitation methods were used in this research to reveal feelings, emotions, attitudes and perceptions and to elicit description of land-use activities and decisions.

Semi Structured Interviews:

The interviews were divided into a number of sections and key questions (see Appendix C). The interviews were used to fill a gap in knowledge that other methods, such as observation or the use of census data were unable to bridge efficaciously. I was also investigating complex behaviours, motivations and a diversity of meaning, opinion, as well as experiences.

The participants were asked to reflect on my interview questions (see Appendix C). The questions asked of participants related to: Whether and how rural landholders had changed the land-use on their properties over time. What were their reasons and motivations for their land-use on their properties and which underpinned land-use decisions. They also involved discussion of attachments and relationships with place and whether these had influenced land-use decisions. The interviews concluded with the discussion of growing older and the problems and possibilities of ageing in land-use decisions and choices to remain in place or leave their properties.

Primary questions for my interviews were comprised of carefully worded simple question headings, which led to descriptive, storytelling, opinion, structural and contrasting answers which were capable of initiating discussion on a new theme or topic. Secondary questions to those prompts then encouraged the participant to expand on any related issues. I felt all the interviews carried out over a period of approximately six months in 2018 went really well and remained focused on the matter at hand, with only a little digression during conversation occurring. All were carried out on the participants' properties, some more remote than others, with the exception of one, who kindly visited me during stormy, winter weather when his property was inaccessible. Interviewing on participants' properties also allowed me to encourage participants to reflect on the land-uses and landscapes in which they were situated and we often had discussions as we moved around their properties. There was one exception to this method where the participant Steven, came to see me at my home. Fortunately, I only experienced two rainy days during all of my field work. Realising that transcription of recorded data is quite time consuming and not wanting to intrude too much into the privacy of my participants'

lives; interviews were restricted to on average, about one hour. That time frame decided upon was for practicality and courtesy. Towards the end of the interviewing process, I engaged in subtle cues and prompts of verbal or non-verbal signs and activity that helped indicate to participants the closing of the interviews, rather than abruptly terminating the interview. I will add, some participants could have talked for hours, as they were so enthusiastic, wanting to make sure I understood their whole story. Some even became quite emotional talking about past difficulties and challenges they had experienced, or were facing. Many of these issues included unforeseen natural hazards such as floods, droughts and snow, as well as social, familial and economic challenges. Importantly, ageing was seen by many as a big challenge with regards to deciding to stay on their property or leaving later.

During interviews, ordered but flexible questioning often allowed me to take the role of being more 'interventionist', which required me to redirect the conversation if it moved away or completely digressed from the research topic. I maintained a critical inner dialogue, which Adelman (1981) suggests during the interviewing process requires constantly analysing and trying to understand what was being said. That helped in simultaneously putting together the next question or prompt.

I used a digital sound recorder and two field note diaries (see Figure 3.1) for recording interviews and thoughts. Recorded data from interviews was transferred immediately afterwards to a compatible programme on the PC computer for transcription. Interviews were then analysed thematically. A 'Field Work Diary' was used to accumulate a written record of the field work experience that comprised my observations, personal reflections and maps. A 'Research Diary' recorded my reflexive observations, as well as thoughts and ideas about the research process in a social context, and my role in it. I used the information from these two diaries to help in analysing all of the combined data for coding and thematic analysis later.

Photo Elicitation

The visual method of photo-elicitation I employed according to Harper (2002:13) is based on, 'the simple idea of inserting photographs taken either by me or the participants into a research interview to discuss'. The visual documentation of places as a form of mapping was clearly connected to research questions and not just for illustrative purposes.

Visual methodology for photo-elicitation purposes was achieved by me sending a compact digital camera (with instructions) by courier or utilising participants' own mobile phone photos to discuss when I was there. The principal objective of this method was to elicit alternative ways of seeing and understanding images with the participants. My rationale for wanting to complement my qualitative oral interviews with this visual method aligns with Harper (2002) who suggests that it invokes a deep discussion during the interview of the values and meaning of pictures taken by participants. For my part as the researcher, the photos were intended as a form of photo-documentation to analyse any particular visual phenomenon afterwards for inclusion in the research project. I also took my own camera for photographing significant attributes of the landscape that participants wanted to show me.

To achieve this, I had asked the participants, prior to me coming out to their properties to interview them, if they could kindly take photos with the cameras I mailed to them, of images of things they saw as being significant or important in their lives on their properties. For those who were not confident with camera usage, I assisted and took photos with them directing me as to what images to take, as we walked about their properties. By using digital cameras, this technology enabled me to discuss the images straight away and ask why those images were selected during interviews. I was surprised and most grateful at the lengths many participants had gone to in making sure they took plenty of photos to support my research, when I arrived to interview them. Many of the photographs taken by participants expressed their strong emotional attachments to place that they wanted to retain visually and show me. That aspect supported my research by contributing to my understanding of their feelings of connections to the past and present. I also found that the photos taken by participants assisted as a basis for discussing attributes deemed significant by them, which gave me a wider insight to their connections to the landscape and place attachment.

By using more than one method and mixing the different methods for my research in this manner, I found there clearly were benefits. Rose (2016) commented by mixing one method with another is a useful strategy for opening up the empirical focus of a research project, because what one method overlooks, can be given attention by another. I felt that the wider dimensions of research enquiry utilising photographs and interviews complemented each other with visual representations illustrating their accounts and helped in addressing my research questions further.

3.4 Analysis of data

Interviews were transcribed into written text as soon as possible to ensure the most authentic possible record of the interview. I needed to make a separate note for descriptions of gestures, tone and nuances of accent and vernacular participants used. The record of the interview also drew on my field work diary notes, taken down at the time, about observations of non-audible data and intonation that arose during the interviews. The transcription was a 'written reproduction of the formal interview which has taken place between the researcher and participant' (Minichiello et al., 1995:1). All participants were given the option to receive a copy of the interview transcript if they wanted one.

After organising research data from interviews, I then worked through the analytical process of making sense of it all, initially through the method of 'Thematic Analysis'. The thematic analysis conducted involved identifying patterns of meaning across my data set, which then provided answers to the research question being addressed. Patterns were identified as Braun et al. (2013) maintained, through a rigorous process of data familiarisation, data coding, theme development and revision as well as defining and naming themes before writing up. Coding of the entire set of interview transcripts involved generating codes that

identified salient features of the data, which was relevant in helping to answer my research questions.

Themes I identified from interviews were grouped together according to their similarities, substantive relationships and conceptual links, along with meanings, processes or definitions. As Cope (2010) points out those methods help develop a coding structure. Different phases of my thematic analysis in not too rigid a sequence were: getting familiar with the data, coding which identified important features relevant to the research question, searching for themes, reviewing themes, defining and naming themes and lastly, writing up the final phase. That phase was the weaving together of the analytic narrative and data extracts and contextualising the analysis in relation to any associated academic literature I had researched for the project. Some of the key themes which emerged from the data were meanings, values and attachments to places, economic, personal and familial motivations, as well as challenges and opportunities of remaining in place as participants aged. Other examples of themes emerging included economic land-use changes, familial obligations and maintaining past activities. All of these are discussed in subsequent chapters, along with several others that I identified.

While writing up the results of this were the predominant means of communicating the qualitative research for this research, images were able to convey the results of the research more directly and more effectively to non-academic audiences (Rose, 2016). Choosing the photos for my thesis was very selective in relation to content matter, in order that my ethical assurances of participant anonymity were not contravened.

3.5 Summary

The qualitative methodology of this thesis enabled me to explore and analyse social and visual constructs of purposively selected older rural landholders and understand their associated land-use changes. The philosophical and theoretical basis for conducting this research method was that it gave in-depth answers to questions I was looking at. Epistemologically developed questions were based around what sorts of deeper motivations had influenced decisions, what were the values and meanings of place, and what challenges had there been at a personal level. Interviewing took place in rural environments in the South Island, in areas that I was familiar with where I did not feel like an 'outsider' and had a good rapport and understanding of the participant communities.

Massey University's ethical codes of conduct and guidelines were adhered to at all times. Research participants all took part voluntarily, free from any coercion or influence, and their rights, dignity, and privacy was respected and appropriately protected. Social constructions of participants' reality given from interview questioning, gave an idea of how older rural people had chosen to engage with life discourses in relation to changes in their physical and social spaces. Not surprisingly, my participants were keen to be involved. For some, it was a way of

being recognised, or some said finally 'noticed'. And for others, a way to have been part of a research project about their isolated or sometimes forgotten areas, which I saw as important rural South Island environments of change.



Figure 3.2. Inquisitive working sheep dogs in Central Otago.

Photo: J. Knox

Chapter Four - Land-Use over Time for Rural Landholders



Figure 4.1. McKenzie Region Land-Uses 2020. Irrigated dairy farms, as well as sheep farming and forestry plantation areas. Photo: J. Knox

4.1 Introduction

This chapter takes a longitudinal approach in examining older rural land holders' land-use decisions. Four themes of expansion, diversification, intensification and conservation have emerged from the analysis. To assist the interpretation, these four themes are positioned against broader national trends in the second half of the 20th century. It was found that while one group of the participants conformed to the national trajectory outlined in Figure 2.1, another departed from it. Each of these themes is discussed further in this chapter from the participants' perspectives, drawing on quotes from their interview transcripts.

Figure 4.1 depicts examples of rural expansion, intensification and diversification in the McKenzie Region, close to where several of my research participants have properties. Here the original, pioneer pastoralist sheep and cattle farming land-uses from the 1860s, have been partially diversified over the last forty years into

large areas of conifer plantation forests and then, from the 1980s into farm tourism activities. More recently in the last twenty years in this area, intensification enabled through large-scale irrigation systems has seen the development of extensive private and corporate dairying operations. Interestingly, these new irrigated land-uses have changed the colours across the landscape in this area. It has changed from yellowy brown into vast areas of bright green grass-covered countryside, which has become an issue for environmentalists who have been recently concerned about the effect of irrigation methods on the visual aesthetics of the natural biota being affected.

4.2 Land-use over time.

Figure 2.1 is relevant in terms of situating my participants' experiences, as there is a generalised pattern of land-use change occurring across their periods of occupancy from the 1960s onwards to intensification, then diversification and later some nature conservation. These patterns align with the general changes in rural areas that were made at those times across Otago, the Canterbury Plains and High Country and Banks Peninsula. These features of land-use change sit with research by Molloy (1980) who suggested that historically in New Zealand, there have been five major phases of agricultural development categorized for the period between 1840 to 2000. These were: colonisation, expansion, early intensification, diversification and later intensification. Another view held by Fetzel et al. (2014:205) who comment that 'The fundamental changes of New Zealand's land-use system development was initially characterised by deforestation, the expansion of agricultural land and later by different phases of land-use intensification'.

In defining key productive land-use terms, expansion could be described as the period in which farming expanded across the rural landscapes, to not only cater for a growing local market, but to accommodate increasing overseas demands for agricultural products, such as wool and meat. Intensification involved the increase in production per unit of input. Diversification can be categorised as a process where a farming business develops new enterprises, using the farms assets with a view to create new income streams, usually in addition to the properties traditional farming activities (Manley et al., 2019). Several participants took trajectories that were in concert to recent national economically driven trends, shown on Figure 2.1, by diversifying with other forms of land-use. For example, deer farming was introduced onto Trevor, Mark and William's properties in the 1970s, prior to some of their later land-use changes of intensification enabled by irrigation and aerial topdressing.



Figure 4.2. Deer farming, Timaru district - Canterbury

Photo: J. Knox

Different interviewees used words such as intensification, diversification and conservation in several of their interviews and appeared to be talking about the same thing. However, some were actually talking about entirely different things. Although they used these terms they were not necessarily associated with Molloy's (1980) interpretation of these themes. For example, conservation activities by one group of participants largely took the form of the preservation of existing native bush and trees by fencing it off from stock. The relevance with the national phase patterns in Figure 2.1 to land-use changes over time are in contrast to the land-use change Table 4.1 by many of my participants with larger properties. This shows expansion of farming intensification and diversification, which included increased livestock units, as well as land area expansion, being initially over-sown with English grasses. Then later that changed in order to be 'sustainable', a term described as 'a farming system that does not reduce reserves of natural resources such as energy, water and soil fertility' (Manley, 2019:399). Farmers were then compelled to diversify through intensification strategies in order to adapt to changing national and international economic challenges occurring in the market-place.

Important aspects highlighted in Figure 2.1 include relationships between the economic developmental phases with the commodification of nature. This accelerated through initial deforestation activities to rural expansion, intensification and diversification. Environment concerned NGO groups such as 'Forest and Bird' are seen to respond on the time line trajectory in Figure 2.1 to any detrimental environmental outcomes of these rapid land-use changes. Those changes were considered to be causing degradation of the environment, including soil erosion, water pollution and biodiversity loss were particularly concerning elements of this

degradation. The phases of expansion, intensification and diversification outlined in the literature on land-use change in New Zealand, were also practices that my participants engaged in to varying extents. This is depicted in Table 4.1 and engagement in these phases of land-use did not necessarily occur in the chronological sequence illustrated in Figure 2.1 of expansion, intensification and diversification. However they were mentioned by most of my participants and formed some of the central themes of their land-use over time.

Analysis of my participant transcripts showed several land-holders, had to varying extents changed land-use during their lifetime in tandem with sequences of the national land-use phase trajectory patterns of Figure 2.1 Those changes were from traditional sheep, cattle and arable farming activities, to other income-generating streams, utilising their land for economic purposes, or interesting personal and / or philosophical reasons for enjoyment. Participants with larger properties appeared to diversify into forestry and deer farming. Some even intensified with the implementation of irrigation systems into dairying, or fertilisation of the land by topdressing for increasing stock numbers and crop yields. Participants with smaller properties diversified from sheep and beef, into an intensification of land-uses. For example, growing grapes, olives, hazelnuts or creating income generating streams from farm tourism ventures. Some participants diversified land-use towards the direction of their personal priorities. These changes were either for economic gains or pursuing personal interests, such as nature conservation or preservation, which few participants were solely focused on. Surprisingly, those nature conservation activities did generate some revenue through paid visiting education programmes, nature walk donation fees, carbon credits and on one property, corporate donations for assisting nature restoration projects.

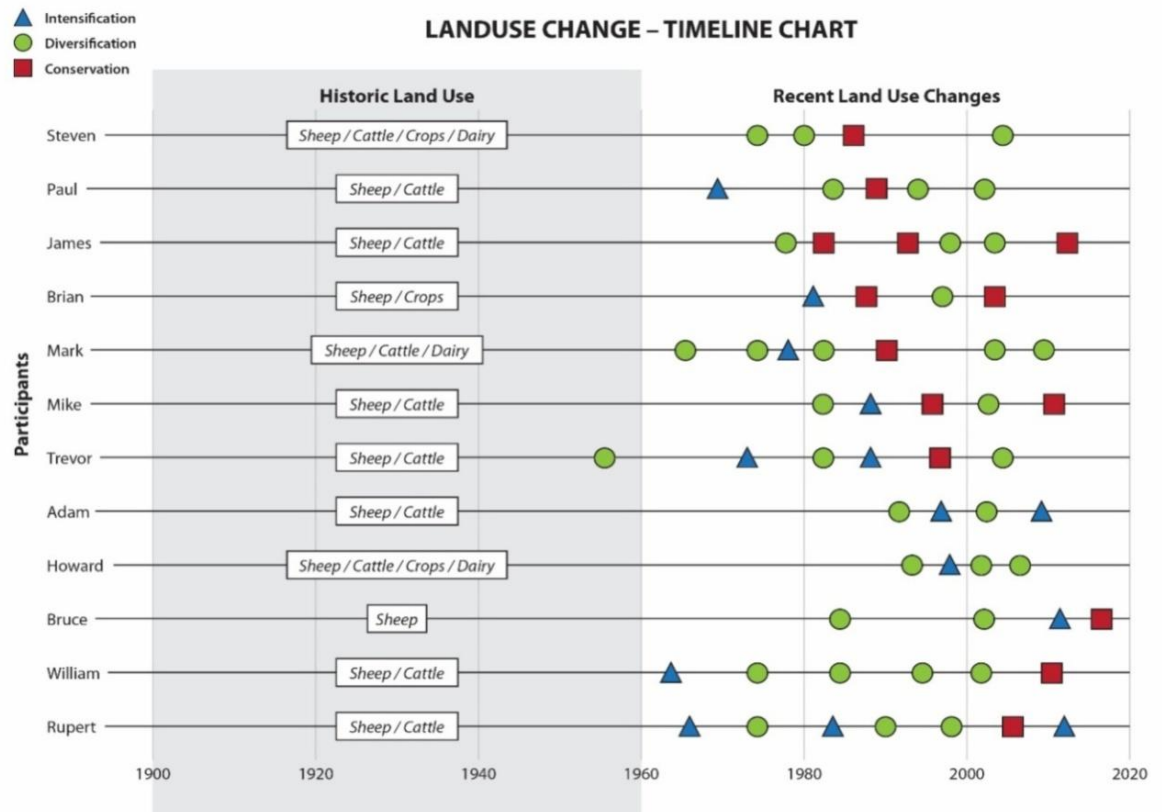


Table 4.1. Different forms of participant land-use changes across time.

Table 4.1 shows the known historic, economic land-uses of all twelve participants' properties prior to any of their various intensification, diversification and conservation activities. Any recent land-use changes are indicated along the twelve participant's time-lines and clearly show various groupings and themes that emerged. Patterns show that land-use intensification from the 1960s was often followed by diversification, then conservation in the latter part of their land tenure by the majority of participants, with some focusing on diversification and intensification only. Some initiated extensive land-use changes just prior to the 1980s and then, mostly all participants had changes taking place after that time period. At about that time in the 1980s, patterns of changes also showed a strong and steady trend in the direction of agricultural intensification. Significant variances in land-use change altered in accordance to differences in participants' own environments, areas of land, financial resources, management skills and their personal philosophies, as well as interests.

4.3 Expansion

The developmental agricultural phase of expansion in New Zealand's landscape transformation Figure 2.1, occurred from the late 1800s to the 1920s, when crop and stock yields grew exponentially with increased land becoming available from the State for pastoral farming. From the 1950s, superphosphate, lime, white clover, ryegrass and livestock formed essential components of further pasture establishment and development in the country (Le Heron, 1989). In early Canterbury and Otago, from the beginning of the 1900s, where several of my participants have properties, the term 'expansion' was about increasing agricultural land as it became available as the State released Crown Lands for settlement.

4.4 Intensification

Participants' intensification of land-use occurred primarily because of economic objectives. Lambin et al. (2001:264) describe the term intensification as 'higher levels of inputs and increased output in quantity and value of cultivated or reared products per unit area over time'. My participants, who had ready access to water for irrigation and buoyant economic means through State farming subsidies, as well as affordable bank loans, consequentially had the incentive to chemically and physically improve or expand their farms. As a consequence of these incentives they could increase stock numbers and productive crops and were not restricted with intensifying any land-uses. Intensification occurred at differing levels of production across participants' varying land size spectrums. It ranged from intensifying what was already there, to establishing crops or livestock units to be farmed in an intensive manner on their land.

It became apparent that intensification of land-use was predominantly made by participants on generational properties with economic gains as their key objectives. Land-use intensification by them was in contrast to most participants' land-uses, who were the initial purchasers of their properties. An example of this intensification is shown with William's large generational property, which forty years ago had been top-dressed with super phosphate and then over-sown with English grasses:

In our lifetime we went from 10,000 stock units to 60,000 stock units, because we took the opportunities to buy more land and increase productivity. Similarly, we divided it up into smaller blocks and we have done a lot of tree planting.

Irrigation technology optimising ready access to affordable funding at the time and available water, enabled land-use changes for a large group of participants from the 1970s, as it is shown in Table 4.1. As an example, Rupert had irrigated his property to intensify stock:

I guess in my era, I was considered a farmer with irrigation, as opposed to being just an irrigation farmer. I went to a seminar at Lincoln University years ago where they said you must become an irrigation farmer. In other words, you up your stock numbers to anticipate it and accommodate the increased growth and so on.

Howard provided another scenario involving intensification of land-use in the last twenty years with irrigation:

Irrigation has been huge here and that has been the biggest land-use change, but ironically my grandfather spent his life taking water off and I have spent my life putting water on.

It was noticeable that all participants had changed their land-use over time to varying extents, but especially in the last three decades. The changes from traditional pastoral farming ranged from increasing stock numbers, introducing new crops, initiating forestry ventures, introducing organic crops, through to capitalising on the aesthetic values of the landscape, historic buildings and nature conservation initiatives, as well as income generating tourism initiatives. Land-use changes occurred across all participants' properties, irrespective of their different areas of land. Interestingly, any nature conservation activities which occurred, tended to happen later in participants' lives and property tenure. An example of some smaller intensive land-use changes were on Adam's recently purchased property:

We put a considerable amount of effort into converting bare paddocks into effective tree and vine crops and I would like to demonstrate that it's possible to take a small piece of land in the right place and by growing a specific mixture of crops, generate an income and a good lifestyle.

In contrast, William characterised his land as 'not being farmed effectively' when he obtained the property early in the 1960s. He recognised the land was not really being developed properly, as he would have liked it to be:

So, the first thing we did, we ploughed good flats and grew modern grasses on those flats. And the hill country, we subdivided from hill blocks that were three thousand acres and we subdivided those hill blocks down to five hundred-acre paddocks. We treated the hills no differently to the flats. You can't plough them obviously, but we treated them the same way with heavy grazing, superphosphate and by introducing better grasses.

The significance here for land-use change, was that both these participants went onto their places with alternative plans and ideas for what they would be doing economically in the long term. Another example for long term land-use change is shown by Bruce with what he did on his property:

After getting large scale forestry consent granted, that has changed the whole dynamics of the property from dry grassland into quite an intensive forestry programme.

Some land-use intensification was minimal and this occurred on Rupert's property:

It is basically a sheep, and beef property. Historically, that is what it has been and we have tweaked that to some extent with some irrigation and some more intensive farming on the front country, but it is reasonably limited to that. When I say intensified; not to the extent of highly intensive Canterbury farming, but relative to what it used to be. Blocks of larger pieces of land are cut up into smaller blocks and we have done a lot of tree planting on those.

The significance of these changes is that these participants had all realised their land carrying capacity potential and intensified accordingly, in different ways. The term 'carrying capacity' Pawson (2001) suggests is the level of use that could be made of land without undermining its productive capacity. After the 1980s, this change transitioned with similar economic objectives, by way of either increasing stock numbers or development of extensive forestry to maintain or boost productivity.

With restricted space available, there were some participants who intensified land-use with their smaller farm sizes. As an example, Mark justified his intensive tree planting approach:

We don't have enough areas to plant Radiata pines; you have to have at least a five acre block and probably a ten acre block of Radiata pine trees to make it worth-while. A lot of high value alternative timber species have been planted here including Cypresses, Eucalypts and Polonias. I have even got small blocks of Black Walnuts and Acacias out there.

Adam also intensified his modest ten hectares:

When we bought it in 1996, it was basically just bare paddocks. We have put a considerable amount of time and effort into converting those bare paddocks into effective tree, olive and vine crops. We then put in irrigation so that all the specialised fruit trees could get water, when they needed it.

There were several other examples of different types of intensification used by participants that did not involve productive farming, including Mike, who for several months once leased out most of his property, including his historic house and out-buildings for the filming and location setting of a Hollywood feature film. Also, Paul capitalised on some areas of his land and buildings to perform sheep dog and shearing shows for cruise ship tourists. In other instances, Howard and his wife made use of old farm buildings on their property by creating venues for weddings and corporate functions. Brian's wife created an expansive, landscaped garden

that attracted garden tour visits. James and Brian have both developed commercial walking and cycle ways on their properties, which also gave them an opportunity to engage and socially interact with different people outside of their farming networks. These land-use changes had all been carefully planned and sometimes gave the opportunity for several participants' spouses to be actively involved, utilising their prior skills and knowledge before they had moved onto their property. Some of these skills they made use of were from previous university qualifications in environmental sciences and landscape design.

4.5 Diversification

In summary, the examples of diversifying land-use by participants included changes from: sheep and cattle to forestry, deer, vineyards, olives, nature conservation and preservation initiatives, fruit trees, truffles and farm tourism. Mike on his 6.6 hectare property, purchased in 1990, that had been once part of a large traditional pastoral farm and was overgrown with weeds, as well as exotic bushes when he first obtained it, had started with several new land-uses:

I got rid of the gums, macrocarpas, hawthorn, elderberry and old man's beard. Then I planted various parts of it in olives, sweet chestnuts, hazelnuts and I do run a few cows now.

Mike's personal interests in land-use, other than just primary production for economic gains on the smaller property, saw him planting it extensively with ornamental plants, as well as some fruit and nut trees:

I am not making money out of anything agricultural certainly, but having said that, the place is becoming very picturesque. It is at the point now where after years of establishing things, you are still planting and changing things. But things are starting to look quite good now, though the lawns just have to be mown from time to time. In some ways, I just see myself here now, not as a farmer, but more as a referee in keeping the animals and plants apart from one another!

Other forms of diversification on newly purchased properties showed Brian's example of land-use change, where he had partially maintained what was already being farmed there with sheep and cattle. Then, he fenced off large areas of existing native trees and bush for nature conservation and preservation reasons which he and environmental consultants had deemed important enough to keep. Following that, Brian and his wife created a tourism venture based around a large landscaped native plant and exotic species flower garden. Another example of land-use change was exhibited by Steven, who in the 1990s diversified completely away from his generational, arable farm into 'organic farming'. That is a term which Manley et al. (2019) maintain is a production of crops without the use of inorganic inputs such as chemical fertilisers and pesticides, as well as rotating crops to maintain or enhance soil fertility with nitrogen fixing legumes. Steven also

diversified in the last 20 years into forestry and is currently looking at the possibilities of a farm tourism venture associated with organic farming awareness education and methods. He also is considering establishing electricity generating wind turbines for selling power to the national grid.

A pattern of gradual and partial land-use change emerged for all participants. Many took a cautious approach by diversifying, but ensured their main source of income in terms of farming continued to be predominantly agricultural economic activities.

This came about, as a rule, with participants from larger generational properties. For example, Howard kept traditional arable activities on one half of his property and intensified the other half of the farm into dairying, after putting in an extensive pivot irrigation system. Other connections which united that group of generational owners saw several of their spouses creating farm tourism ventures, using skills they had prior to living on the farm.

4.6 Nature conservation and preservation

Land-use change patterns that involved conservation and nature preservation activities saw several participants intentionally setting aside land for planting or preserving existing native grassland or bush. Conservation is a term described by Park et al. (2013) as the maintenance and restoration of natural resources, commonly by protecting species and habitats from uses that would diminish or even eliminate them. Preservation in contrast to conservation is an activity of protecting something which is sometimes different to nature, such as old, historic buildings, sites, structures, as well as objects from loss or danger (Perkins et al., 2013). Today, in order to simplify matters, the word conservation tends to be used for both types. Initially, Trevor's land, which nobody had wanted because in the early 1900's it was overrun with rabbits, was barely able to farm sheep or cattle economically. That changed positively in economic terms for Trevor with diversification, characterised by land-use changes to deer farming and exotic forestry that were added to the existing sheep and cattle farming. In a short space of around 40 years, it changed from being a struggling uneconomic farm, into a productive and economically buoyant property with deer and forestry, as well as the original cattle and sheep. After retirement, Trevor became actively involved in a local land-care group with river catchment nature protection activities to do with weed control, nature restoration (planting trees and shrubs) as well as trapping animal pests such as cats, stoats, ferrets and hedgehogs. Also, Trevor occasionally gave talks to several university' environmental science students' field trips for research projects, who visited his former generational property. He expressed his passion for being involved with nature conservation work at his old place and saw it as a worthwhile way to be actively involved. Going back to reminisce and socialise was seen as important to him:

We work very hard with other local property owners, helped by conservation authorities and the regional council to keep

the area in the river catchment free of broom, gorse and other weeds. It is important to do if you want to preserve the wildlife. It has taken a life of its own, that I would have never believed when I was farming there. All these government departments and us, working together, not only controlling the weeds, but trying to improve the life of the birds living there by the river.

Most of the activities of this nature occurred in the latter years of participants' property tenure, which is noticeable by the group showing conservation activities illustrated on Table 4.1. Several participants talked proudly about their efforts with nature conservation, including Bruce and what it really meant to them:

The conservation area on the property is quite important to us. We have identified 180 hectares that has high conservation values. We have fenced it off and we monitor that quite intensively.

Mark who was also very enthusiastic about native plant restoration on his generational property stated,

I like native birds and things like that too, so I plant a lot of flowering trees for them and berry-producing trees. It is nice having the bellbirds flying around and there is actually a wood pigeon up in the trees in one of the photos I took for you.

James viewed himself as a 'preservationist' type of manager of the land:

So instead of trying to make an economic return from farming, we are going to take the grazing off and let it revert to native forest. Because our goal is to protect the native biodiversity that was left here after the farming of the land. Then, to restore it and to slow the biodiversity loss, which was happening in the area.

A strong message indicated by these participants, was that issues surrounding New Zealand's biodiversity protection and conservation had become important for them, particularly in the last two decades, where nature protection activities always came onto their agendas in terms of land-use. Despite this Norton et al. (2000:33) commented, 'While there have been many exciting nature conservation initiatives on private land in New Zealand, there still appears to be an underlying feeling that the only way to achieve nature conservation goals is to take the land out of production and legally protect it in some manner'. That comment connected with the views held by Brian who had diversified considerably on his property. He was one of the only participants who had actively put conservation measures in place, under legal protection frameworks, to secure the future of the preservation of large tracts of native bush and trees he had on his land:

The majority of what we have conserved, we've also covenanted both with the QE11 Trust and our regional

Conservation Trust. So, they are trusts in perpetuity, so that nobody will be able to come in here and put stock animals on those blocks of land or cut them down for forestry or whatever. So, you know, we feel to that extent, the conservation for the future of New Zealand, as well as the world, is basically about as good as you can do really, in terms of security.

This type of nature conservation activity by Brian connects to Norton et al. (2000.33) who maintain 'that through integrated land management, it should be possible to sustain a productive return from the land, and the conservation of native biodiversity.

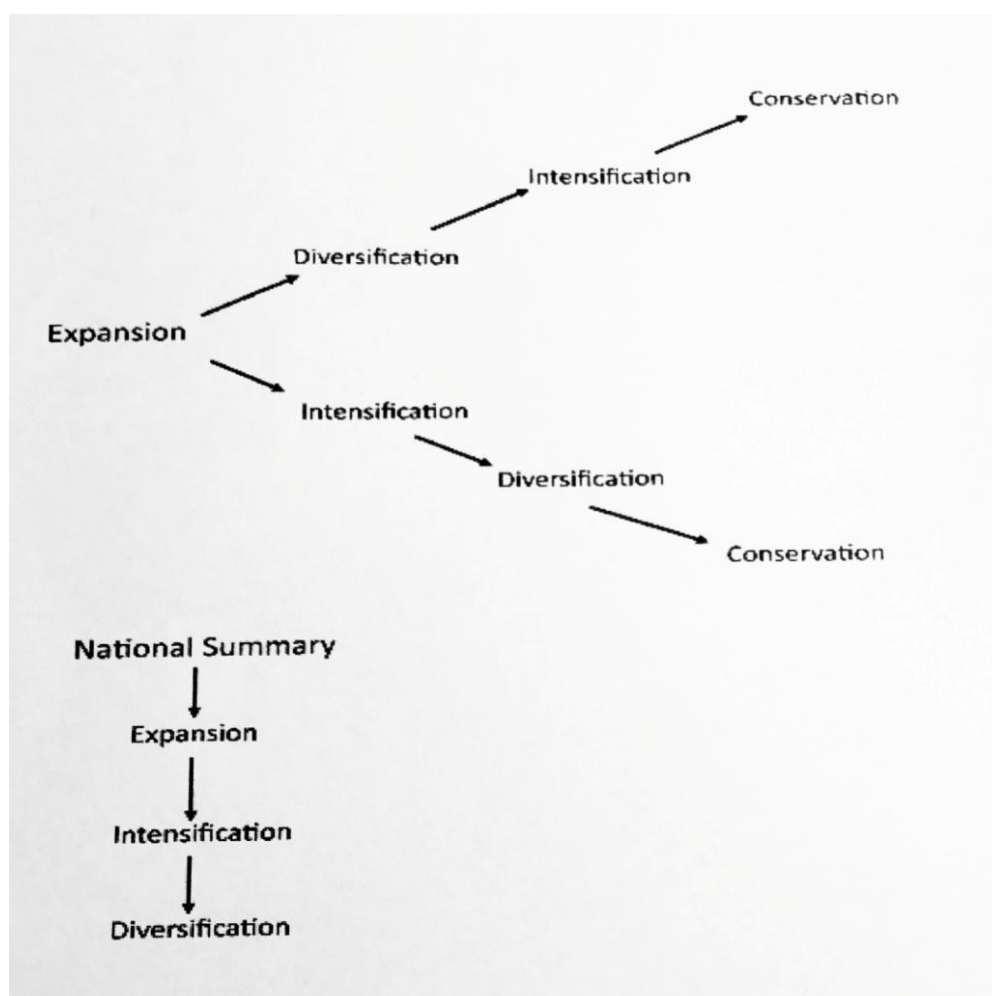


Figure 4.3. Two land-use trajectories of participants in comparison with the national expansion phase. Details derived from interview data.

Figure 4.3 illustrates how several of the land-use change patterns of intensification, diversification and conservation and their sequential order in two trajectories, are connected by findings from the data of participant interviews.

Patterns of two trajectories highlight trends of diversification and intensification, which united several participants with relatively parallel viewpoints regarding how and when they did any land-use changes on their properties during similar time periods, as they aged. These included Paul, Brian, Trevor, William and Rupert. However, a shared trajectory of diversification, intensification and conservation with another group of participants, which included Mark, Bruce, James and Steven, did not follow the national land-use phase pattern over time, depicted in Figure 2.1. The introduction of irrigation in the 1980s had played a major role for them in that differentiation.

The rationale for any participant actions with respect to land-use changes will be discussed in the following chapter five. These changes were made often as a result of the size of their farms or locality. According to MacLeod et al. (2006) extent and type of changes in land-use have also varied considerably between regions in New Zealand. I asked Paul what were the main changes that he had seen happen on his property, which he has owned since the early 1970s:

Fencing, scrub cutting, subdivision and more scrub cutting. Scrub was right around here at the beginning. That was a bush paddock over there; you can see the one with the tree in it. That was solid scrub all up there.

Whereas Brian in a similar environment nearby, who had taken over the farm he purchased in the early 1990s commented,

We basically put lines on a map. Also, in terms of fence lines, we said above that line we are going to farm that area and we are going to farm that to the best of our ability. We're going to put fertiliser on, we're going to put animals on, we're going to put in a water supply and we're going to fence it and we're going to keep the gorse off it. And then below that line, the fence line, we said 'no', this is going to be allowed to regenerate back to native bush.

One reason for him doing this was that Brian said he had always been interested in nature, having been brought up from childhood on a farm in remote Westland. Consequentially, he saw that his two roles on the property were that of being a productive farmer and a nature conservationist. In one participant's situation, James's land-use changed completely from that of productive farming into intensive nature conservation activities. James described his actions of deliberate land-use changes, which started for him approximately 30 years ago:

It changed the instant we bought it. It went from marginal hill country farming and uneconomic pastoral land farming, to a completely new direction of nature conservation and protection.

After analysing the interview data recorded on this topic it was evident some nature conservation activities were shown to have taken place on most of the participants' properties, often after decades of productive farming.

Land-use Phases	Generational Property Owners						Purchasers of Properties					
	<i>Steven</i>	<i>Mark</i>	<i>Trevor</i>	<i>Howard</i>	<i>William</i>	<i>Rupert</i>	<i>Paul</i>	<i>James</i>	<i>Brian</i>	<i>Mike</i>	<i>Adam</i>	<i>Bruce</i>
Expansion			•		•		•					•
Diversification	•	•	•	•	•	•	•		•	•	•	•
Intensification	•	•	•	•	•	•					•	•
Deintensification								•	•	•		
Conservation	•							•	•	•		•

Table 4.2. Generational and purchasers of properties land-use phases.

Land-use change phases differed amongst all participants, with two distinct patterns shown in the Table 4.2. There were the ones which followed the Molloy, (1980) land-use phases' trajectory (see Figure 2.1) and those that diverged from it as a result of differing tenure situations. For example, of the six generational property owners, all had engaged in diversification and intensification for economic gains, which characterised the group's shared familial obligations for the continuation of agricultural production. Whereas, for six others, who were purchasers of their properties, five had diversified land-use considerably, following their interests and personal philosophies about farming. Three participants of a smaller group had de-intensified some or all economic land-use activities to make available non-productive land, suitable for nature conservation and restoration initiatives. De-intensified land has similarities with a 'Post-productivist Countryside' which according to Phillips (2005) is a term used to signal some break or difference from a countryside dominated by expansive, capitalist production centred within agriculture.

4.7 Conclusion

Throughout this chapter, land-use changes made over time by all of the participants, have been demonstrated with selected examples and specific quotes, drawn from the thematic analysis of the interview data. Their interview responses all assisted in answering my research questions, aimed at finding out how have older rural landowners changed their land-use over time, and to what extent? Two quite distinct themes of land-use change emerged. Diversification, where alternative crops or livestock were farmed, in conjunction, or replaced the existing original traditional land-use activities. The other land-use change was intensification, where higher levels of inputs increased the outputs of crops and

stock for greater economic returns. This was where several other supplementary incomes were generated from farm tourism, capitalising through some of the existing buildings and the immediate natural attributes, as well as visual aesthetics of the landscape.

It was apparent that the temporal trajectories of my participants' land-use over time, did not always follow the national summary patterns from the chart of Molloy's Landscape Transformation in New Zealand, Figure 2.1. One group intensified before diversifying and the other diversified before intensifying. These changes largely occurred from the 1980s onwards. Often those changes reflected on property sizes, inherent social, economic and environmental values and the beliefs, as well as motivations, of the participant. How long the participant had been associated with their property they had purchased also played a key part in decision making for any land-use changes taking place.

Owners of long-term generational properties tended to display a steady and cautious approach to any land-use changes, which were then only altered for sound economic reasons. Almost all participants became involved in nature conservation activities over the last two decades for differing personal reasons and some wished they had done it earlier. It has become apparent from findings in this chapter that lifestyles of people who live in rural places on their properties are subjected to a variety of dynamics. They can be the catalysts to do things with their land as it is subdivided, farmed with stock, landscaped, ploughed, fertilised, planted out, protected and built on. Perkins (2006) comments that the manner in which people live, or make a living in rural areas is ultimately tied up with the many ways in which these varying dynamics work themselves out.



Figure 4.4. Merino sheep 2020 Lindis Pass

Photo: J. Knox

The next chapter five explores the participants' motivations for any land-use change occurring and what factors may have influenced those changes, if any. I will also be examining the relationship between social and economic factors in influencing participants' land-use decisions.

Chapter Five–The context of land-use change over the course of the 20th century.

5.1 Introduction

This chapter sought to answer the second of my research questions about what were the drivers of older landholders' land-use decisions. Examining that question, it primarily focuses on the rationale for changes identified in chapter four about participants' intensification, diversification and nature conservation/preservation activities. Participants' reasons for change were examined for the four major phases of agricultural development, categorised chronologically in the 20th century, illustrated in Figure 2.1. Initially, I drew on my interview data to understand the reasons for participants' land-use changes made since they had acquired their property and over which time periods those changes had occurred. In addition, I discussed patterns of changes which could have aligned with, or contradicted the national phases of land-use changes across rural New Zealand over the last four decades. Then, I examined participants' economic, social and personal motivations, as well as environmental considerations, for any land-use changes they had made. I also explored any outside political influences, which may have happened during the time of their property tenure. With regards to ageing, I investigated any influences that could have accounted for any land-use changes through responses to life changes, as participants aged.



Figure 5.1. Orchards in Alexandra. Many of these were planted out along river terraces in Central Otago after the gold rush had finished in the late 1880s. Photo: J. Knox

5.2 Motivation for participants to diversify and / or intensify land-uses.

Two major land-use change phases in rural New Zealand, which followed earlier expansion driven by economic factors, were those of diversification and intensification from the 1940s. In some ways, capitalism's propensity for constant change does also apply to rural New Zealand. That suggests rural landscapes and the experiences of those who live in them, or who visit them for various purposes, are constantly changing. Land-use changes related to organisation of the land, labour, capital and technology were integrally connected with economic, as well as social crises (Perkins, 2006). That trend was modified to what Holmes (2006:142) maintains is now a 'multifunctional landscape' across South Island's rural spaces, particularly in the last four decades. Describing this term's relevance Holmes (2006) suggested that land-use transition in the direction of a multifunctional landscape was driven by three dominant forces, namely: agricultural overcapacity; the emergence of market-driven amenity values; and growing societal awareness of sustainability and preservation issues. These forces were prime movers of land-use changes, especially for participants with generational properties going back to the 1980s which included Rupert, who explained,

Financially just prior to the 1970s and 80s, things weren't all that good, but the 50s and 60s were good and sheep and beef farming in the traditional style was producing pretty good returns. So, irrigation was the obvious thing. We were sited alongside a big river, which is a massive water resource, so we started developing some crops and intensifying. I don't think anybody advocated wholesale changes, but when we got to the 80s, the Roger Douglas era, when farm subsidies were lifted, there was a need for more intensification.

Interestingly, these developmental phases of land-use change mentioned by several participants are in harmony with national trends of landscape transformation in New Zealand (see Figure 2.1) (Pawson, 2001). The lifting of farm subsidies by neo-liberal policy makers of the Labour government in 1984 were made as a response to outside economic measures that had been affecting New Zealand for some time. The detrimental changes affecting New Zealand's economy were caused by the United Kingdom entering the *European Economic Community* (EEC) in the mid-1970s. That helped, in part, to set off an effect known as economic 'stagflation'. This occurred when New Zealand's rapid inflation, coupled with an economic growth rate, which slowed down as unemployment had increased, coincided with the international oil shock of the mid-1970s.

As a result of New Zealand's economic down-turn in the mid 1980s and the lifting of numerous rural subsidies; many farmers' contingency plans to survive during

that period saw them diversify away from traditional primary production farming activities. These included a reduction of meat and wool production farming to developing other agricultural commodities in order to maintain livelihoods through those tough economic times. The downturn of the economy then related to land-use changes, in order to survive, which Trevor made at that time, in the 1980s:

Roger Douglas's economic reforms changed everything for us, and interest rates went up to about twenty per cent or more on the loans that we had. When we had tough times, we engaged a consultant to advise us on other things we could do with the land, and he made a big impact. He was the difference between us selling up or staying.

To maintain properties as a going concern and achieve economic sustainability, owners who could afford it, embarked on a range of creative forms of land-use diversification. Trevor talked further about their family strategy of diversifying from sheep and cattle, to the idea of farming wild, red deer as well. With regards to setting up the deer farming side of the business, Trevor stated;

There had been some research done by Lincoln University on the benefits of farming deer and my dad had taken some of that on board. He saw the value in being able to capture the deer live, and then develop a deer farm. So, to get his deer, he grew paddocks of turnips to attract wild deer. Then he trapped them in fenced areas along with catching them in the wild with nets and tranquiliser guns from helicopters.

Approximately 50 years ago, Paul who had just started out on his property said, "I was making a loss every year and just could not feed anything". Forced by economic pressures to make it work, he applied and got a land development loan from the government; then had to fence and subdivide it, as it was too difficult to muster. He did all of that work himself and even went out shearing around his area to keep himself financially viable on his farm. Talking about past decisions made, he spoke about his rationale for land-use change at the time:

We really just didn't want to revert back to the weeds that had been on it. The previous owner wouldn't recognise the farm. We've changed everything, improved everything and poured a lot of money into it.

Here, Paul talked about how he had to make continual changes with improvements such as fencing and weed eradication to avoid his property's good condition reverting back to how it had been when he had first purchased it. Paul also sees that his actions currently are leading to an end result; that of giving himself a sense of pride and achievement, whilst at the same time retaining the economic worth of his property. These actions taken by Paul associated with continuity and adaption in ageing Atchley(1999) pointed out that individual choices are made not only to achieve goals, but to adapt to constantly changing circumstances, as the individual sees them.



Figure 5.2. Pine plantation and sheep at Saint Bathans - Maniototo - Otago where one of New Zealand's early 1860s gold rushes once took place. Photo: J. Knox

Increasing primary production land area and consequent increased stock and crop production yields were activities carried out earlier in the 1970s by several other generational participants before they had embarked into diversification and intensification with examples such as irrigation for growing stock food crops like turnips and lucerne. There was a feeling amongst several participants of being unwittingly handed down a responsibility for 'familial continuity', where they felt obligated to continue and maintain the family traditions of the farm's viability. This aspect highlights notions of generational legacy as a prescribed incentive to place an imperative on landowners to farm responsibly and economically, as well as keeping the familial flag flying. To illustrate this point, William described his feelings about some reasons for land-use diversification and intensification:

Just because you get driven to develop, I guess. An extraordinary exciting time in our lives where this great big piece of country we had just hadn't really been developed. It is just human nature of farmers to develop and introduce more livestock.

William's moves really speak to generational pressures he felt obligated to make with an almost taken for granted push to intensify, as well as maintain his familial continuity responsibilities of running the farm. However, there was also a group of six participants shown in the table Figure 4.5 who had acquired their land by purchase in contrast to familial inheritance. This is where land-use changes were frequently brought about by personal interests, values and beliefs. Those

participants generally were not overly interested in what had gone on prior to their occupancy and they had no desire to continue with farm activities that had been there prior. Prior to this diversification of land-use for these participants' farm activities had been based on an ambition of establishing a range of diverse agricultural commodities for economic gains or to help pursue their own philosophies or personal interests. These were sometimes focused on farming alternative products, including organic crops. Some land-use diversifications for the new property ownership group saw the establishment of grapes, olives, farm tourism ventures, Highland cattle, exotic tree forestry with species such as Tasmanian Blackwood, as well as growing truffles. Adam's wish to grow truffles was fulfilled because he had always had a fascination with mushrooms since childhood. Now that he had enough suitable land, he commented,

I would quite like to demonstrate that it's possible to take a small piece of land in the right place and by growing a specific mixture of crops, generate a good lifestyle. Subsidiary drivers to that would be that obviously it needs to be economic, low impact and with minimal use of chemicals. It made sense to buy something that would generate some income to cover its costs and provide us with some retirement income. So, some of that is justification in hindsight, because you don't always do things for nice, neat, tidy strategic reasons, but that is basically how we justify it.

Mike who was in a similar position to Adam, having purchased his property in the 1980s, chose to live where he does purely for the lifestyle. His earlier incentive for land-use change at that time had been economically driven by raising Highland cattle. Associated with being older and in a financial buoyant position now, had enabled other choices to be made by him so he could follow his interests. Talking with Mike, he spoke about what he thought may have persuaded his diverse land-use decisions:

Well, I have often said the reason I bought the Highland cattle was because of Sir Walter Scott. And if you were to ask me what motivates my land use decisions, I would probably have to say in one word, 'literature'. It's just that I am comfortably well enough off now not to have to ring every single last penny out of this place, though I do make a very, very modest income from the cattle. And so, I can afford to just be, in my own idiosyncratic way - but my ideal, all my life, has been to be a country gentleman and I just like being here and living in a huge garden, which has some productive and financial aspects to it.

Those remarks relate to Mike's individualised actions for a 'refurbishment' of his place and it could also be construed by another term, the 'gentrification' of his property. His inspiration for those descriptions has contributed to a creation of a 'post-productivist' countryside. Some of the participants' descriptions alluded to how their land may have been used or capitalised on by previous owners. The way in which it was being used now, was very much dependent on the context of

how each landholder had seen and understood the land through their experiences, wants and needs. For instance, Mark had always tried to improve the soils on his small sheep and deer farm. He had also planted lots of alternate high value tree species in groves in various places across his property. His desire to grow New Zealand native and rare exotic alternative timber producing trees was the prime mover for Mark's land-use changes, moving away from running it solely as a sheep property. Explaining the wide range of tree species he had planted, he stated,

Along with the farming side of things, it is nice to have something that is endangered that is also in its native habitat and you feel like you might be trying to save a species a little bit too. And I like the native birds and things like that, so I plant a lot of flowering trees for them and berry producing trees. It's nice having bellbirds flying around. There is actually even a native wood pigeon in one of those pictures I took for you. And I just think really that all the different trees are a little bit more interesting and a bit more diverse. From that interest, it also gives me the opportunity of sharing my knowledge about different trees with people and trying to encourage them to grow various things.

Another situation of being more focused on the importance and protection of nature, rather than farming saw James taking up his property in the 1980s for that very purpose. He was enthusiastic about all of the existing native biodiversity he discovered there and realised the potential for helping to restore and protect that. James said he was impelled to do more conservation and protection of existing nature there from the moment he first saw and later took over the property:

I was thinking gosh, how I would love to look after a bit of this land, because I could see what was left here and was ready to come back, giving it a better chance of than what it was being given. So, I would have loved to have looked after a bit of that land and let that happen, which it did. And I have never had any regrets; it has been an amazing journey. I have placed immense values on this landscape. To me there is a lovely Māori proverb; Land is forever but people fade away. For me the land is just absolutely fundamental to human existence, and in its own right as well has huge value. And my attachment to this place has grown deeper and deeper, I feel completely native here. But for me, just because I come from an European ancestry, I still feel totally native here; more than anywhere else on earth.

Other contributors for land-use change, expressed by several participants, included responses to changes made in their family dynamics, personal visions and altered social circumstances or health issues as they aged. I will discuss

these in more detail in the following chapter six on ‘perspectives on ageing in the rural environment’.

5.3 Participant reasons for recent diversification and intensification of land-use.



Figure 5.3. Land-Use intensification with pivot irrigation for dairy farming – Twizel. Photo: J. Knox

Diversification and intensification outlined in the previous chapter four, described several participants’ early activities that were connected by desires to improve land-uses for economic gains. Intensification was often initiated by participants with irrigation schemes set up by them from the 1990s. Those schemes were in order to intensify production of high value products, such as dairying on dry land that would not have been capable of that type of land-use, mainly due to a lack of water. Howard described his economic viewpoints on sustainability of his farm:

It is all about economics really. In the drought, in the dry weather we struggled to make much money at all, because the crops had failed, and you couldn’t finish lambs and you certainly couldn’t have a dairy farm, so it was economics for land-use change that was the real driver. We like to think that we are generational famers, so what motivates any changes now, is for those changes to make us economically sustainable and be proud of it too, not probably, but definitely.

Howard’s notion of being ‘economically sustainable’ was the continued economic viability of the property. Often several participants referred to the notion of ‘economic sustainability’ whilst talking about their land-use actions. Manley (2019)

describes that as a term which incorporates farming techniques that have at their heart, principles of protection of the environment, as well as the care of animal health and welfare. There were other drivers for land-use diversification by participants with some of these changes often occurring in the later parts of their property occupancy. For those participants, any property land-use changes, especially during the last three decades, had involved diversification for the purposes of nature conservation and preservation. Influences for those actions taken, appeared to have coincided at that time with developing global and national trends of the 1990s around the publicity of the environmental movement. Kosek (2009) points out that the phrase 'environmental movement', relates to any social or political movement directed towards the preservation of natural resources. Also, it concerns the prevention of pollution, or the control of land-use, with the primary goal being for nature conservation, restoration, or improvement of the material environment. This includes both wise use and preservation elements, but does not indicate the conflicts between the two.

5.4 Diversification of land-use with nature conservation/preservation

Several participants commented that they had become knowledgeable about rural environmental issues in New Zealand as they grew older. From that awareness, they were inspired to have at least some nature conservation and preservation initiatives on their properties in conjunction with their ongoing agricultural land-use activities. In turn, that aspect of farming style links to the concept of socially equitable sustainable development (Jay, 2007). This trend which occurred sometimes was made as a response to a wider national realisation of the concerns about pollution of waterways caused by excess agricultural nitrate and phosphate runoff, predominantly since the intensification phases of land-use in the 1990s. Participants in positions of economic stability appeared to have been those who could afford to diversify by selecting various pockets of native vegetation for protection and fencing it off from stock. Personal environmental values and beliefs also played a part in some diversification activity of this nature, by participants who had recently purchased their properties. Examples of this activity related to what both Bruce and Brian had instigated on their properties. Brian, in his 60s had remnants of native bush on his property and made a concerted effort to fence it off from stock. Summing up his reasons:

I'm not sure if 'motivates' is the right word, but I guess I really want to make a difference, in terms of conservation. In other words, I guess I want to leave something for the next generation, and for future generations that is worthwhile.

Brian's approach to conservation suggested he was thinking more in terms of feeling some sense of stewardship for selected areas of native trees and plants on his property. He was also attempting to create a legacy for future generations with regards to what he had achieved with nature conservation and preservation initiatives. Importantly, this action was made by fencing off several native bush areas from stock that he and professional environmental advisors deemed had

value that was significant enough to preserve. With more recent nature preservation and conservation initiatives on his property, Brian's activities sit well around the concept of 'actively ageing' as he gets older (Stenner, 2011). The theory of active ageing and how it relates to my participants' actions will be discussed further in chapter six.

Another participant, Bruce, also in his 60s had fenced off 180 hectares for a nature conservation area from his extensive primary producing property. Regarding what his agenda was for his environment care and diversification activities, he explained,

Economics is a fair chunk of it, but also the social responsibility that we have for the property and to the community, also to the well-being of the land.

Bruce's actions to diversify his land-use were made partly because they implied a social contract with the wider community living there as key landholders. This was based on contributing to the local community and helping the well-being of the land, as forms of social responsibility. Bruce's reasons to engage in this could be construed as 'social capital' (Gidwani, 2009) because it was possibly intended to enable access to and participation in groups, thus benefitting individuals and communities.

Mark realised diversification of land-use by incorporating conservation and preservation of endangered tree species on his generational sheep, cattle and deer property were all important factors in the makeup of his property. By planting hundreds of native and exotic trees across his property, he felt they had various farming benefits and at the same time, were fulfilling his personal interests which he had in unusual and beneficial trees:

For me, it is essential to have diversification with trees, because you just don't know what diseases are going to come in next. You don't know whether some things tolerate drought better, or wind or frost or whatever. For example, the tree lucerne is excellent fodder for the stock and the native wood pigeons love it. The trees fix nitrogen and they provide good shelter and they build up the soil. With other endangered species of exotic trees I have planted, it is nice to have things that other people don't have and being endangered here, as well as in its native habitat, you feel like you might be trying to save a species a little bit too.

Mark's economic and conservation activities on his generational property appeared to be driven by his personal philosophy of farming in a holistic manner and incorporating nature conservation interests associated with the care of the environment on private land. Mark's actions harmonised with Molloy's (1989) observation that much of the focus of nature conservation in New Zealand and elsewhere is on formerly protected areas such as national parks and reserves.

Now some of the biggest challenges for nature conservation lie in areas the most intensely used by humans, such as farms.

Rupert in his late 60s had recently retired from his generational sheep property. Although moving off the property, he had retained a keen interest in what occurred there and was still involved in some decision making with the new owners. Having conserved some of the old horse-drawn farm machinery and the first sod cottage on the property, he continued to be passionate about the protection of native vegetation on his former property:

I am immensely determined that the tussock will stay as tussock country. There have been thoughts of a lot of that country being worked with mechanical disks, and the likes. And I am a great supporter of the original cover on those hills in my time here. Prior to that, they were covered with Totara forests and prior to European settlement they were burnt down by Māori. But I think the Silver Tussock out on the hill country now is superb. It provides a microclimate for English grasses and improved grasses and clovers to grow between them. Whenever activity goes on there, I am always supportive that we make sure we don't overgraze it and we preserve the tussock country. On some of the other hills, there is mostly a native Matagouri base. Some might say why don't you clear it? Well, it provides good shelter and the true Matagouri is quite a nice plant.

Rupert's holistic approach to farming had encapsulated nature and heritage conservation with day to day farming activities on the same landscape. When asked about the relationship with his former generational property and what the rationale was behind any changes of land-use and decisions he had made, he replied,

It is all about sustainability of the property and financial return. You see we have been here for a hundred and something years and it was pretty much a running shingle and rabbit infested property when my grandfather took it over. And I am quite proud of the fact that now this property aesthetically, carbon-wise and pest-wise, is infinitely better than it's ever been. So, I am a great believer that you are the custodian of the land for the period that you farm on it and if you are lucky, you hand it onto a member of your family, or you keep it in the family. But so regardless, John, when you have been here for 106 years and you have been through the Depression and two world wars and Roger Douglas and droughts and fires and then you get a letter or booklet from the local environment council in which they tell you how to be a sustainable farmer from someone probably who has been

to university for three years; it grates a little bit. I think the sustainability is in the evidence that you have survived for four generations, and you have ended up with a better product than you had started with.

Rupert's strong sense of place attachment was expressed at times in an emotional manner. Along with his care for native flora and appreciation of the landscape's aesthetics, those special features drove him in several ways to alter what may have happened on the farm through any land-use. According to Baldwin (2017) a connection to place was similar in many respects to how Rupert felt. It is about the relationship people have with both land and water, sometimes built over the long term through interacting with the place in different ways, other times developing quickly. Collectively many of the twelve participants' nature conservation or preservation activities resonate with Keating (2009:29) who found 'an environment contributes to older rural peoples' meaning-making about self and ageing in several ways'. The natural elements, idyllic, challenging or wild, inform how participants have lived their lives. Their choices to stay within the immediate region have been informed in part by a desire to continue to experience the natural environment. Yet, the natural place is so much a part of participants' lives, that at times, distinguishing self from place is difficult.

5.6 Conclusion

The two empirical chapters four and five have examined how older rural landholders changed land-use over time and what has inspired them to do so. As a result, several conclusions about those desires for change were made. For instance, their land-use decision trajectories often depended on the context of their life situations and future plans of involvement as they aged. The participants were divided into two key groups of property tenure, which included six participants with generational properties. They had continued on with traditional farm economic activities, which responded at times to economic market signals. Those land-uses were based mostly around diversification and intensification activities. The other group of six participants were those who had purchased their properties over the last forty years and were predominantly altering land-uses for personal or philosophical interests, well-being and capability recognition.

Unforeseen economic influences brought about mostly by the introduction of the New Zealand government's neo-liberal policies of the 1980s impacted many participants, particularly generational property owners. They had suddenly found themselves with economic constraints, which in order to extricate themselves from those situations to survive, required creative diversification strategies of land-use activities in the direction of other income generating streams of production. Examples, illustrated by several participants, included deer farming, farm tourism, truffles, horticulture and exotic tree planting. However, some participants were not too affected by outside adverse economic pressures, which prevailed in the 1980s, as they were economically buoyant enough in the beginning and during

those challenging times, to manage to cope financially. As a result, they were able to navigate through this difficult period.

It was noticeable that some land-use changes had often been instigated later in participants' lives as they aged. Initiatives were carried out which were connected to conservation and the preservation of any existing native trees and bush on their properties. Those moves were driven either by personal and philosophical reasons, or community responsibilities, which they felt the need to address. In sum, over the last forty years, influences for land-use change during this time took place for most participants, as a response to their economic, social and environmental situations. As these landholders became older, had financial security, diversification provided them with a means to follow their interests and passions and though many of these activities made a profit, this was not the driving factor for initiating them.

Land-use change trajectories of the participants mostly aligned with the national phases of landscape transformation in New Zealand, see Figure 2.1 (Pawson, 2001). Other inducements for participants' different land-uses they had made over time, coincided with the importance of understanding the meanings and values of ageing in place for them. The realisation of growing older was often a feature of the influences for several land-use changes made by participants. Reflecting on their decisions to make changes, they became more aware that ageing had relevance in choosing new directions on their properties. Influences for these land-changes will be discussed in the following chapter six.



Figure 5.4. Fantail (Piwakawaka) attracted to regenerating native bush on a sheep and dairy farm - Canterbury. Photo: J. Knox

Chapter Six - Perspectives on Rural Ageing



Figure 6.1. Merino sheep - Rakaia Gorge - Canterbury

Photo: J. Knox

6.1 Introduction

The intent of this chapter is to understand my participants' ageing in place and to investigate their emotional attachments to the social and physical dimensions of their properties. In order to explore these ideas, the interview questions focused on:

- The meanings and values older landholders ascribed to their properties and landscapes, with discussion of whether these have altered as participants have grown older.
- Whether participants identified any challenges of remaining on their land as they aged and if so, potential responses to these challenges.
- Their plans if any and/or for the future of their properties.
- Their reflections on whether growing older had impacted on any of their land-use decisions over time - if so, how, why and in what way.

To assist in the process of interpreting patterns and themes that emerged from participant interview transcripts, I often drew upon recent literature connected with social and spatial aspects of rural ageing by Atchley, Wiles and Keating.

6.2 Plans for the future

P A R T I C I P A N T S	Influences for staying on or leaving properties									
	Health Deteriorating Concerns about adjusting to new life Mental emotional stressors	Becoming tired of continuing Physical challenges Ageing health issues	Training younger generation to take over Succession Familial Continuity	Not viable Economically any more	Still keen to continue with farming and / or conservation efforts No immediate plans to leave Adaptation	Access To aged medical services Own transport Isolation loneliness	Have set up set property to enjoy different activities with land Varied plans to leave	Have left to retire close by Still take an interest	Familial pressures to leave property	Ageing in Place and content to stay
			Group One	Group Two		Group Three				
Steven				•		•				
Paul		•							•	
James				•					•	
Brian				•	•	•				
Mark				•		•				
Mike						•			•	
Trevor				•			•			
Adam		•	•			•				
Howard			•							
Bruce				•				•		
William			•							
Rupert		•	•							

Table 6.1. Influences for staying on or leaving properties

Key:



Group One - Generational property owners focused on familial continuity of farm.



Group Two - Continuing farming and nature conservation initiatives - not leaving.



Group Three - Some economic activities; enjoying lifestyle and personal interests.

Table 6.1 indicates the influences for participants staying or leaving their properties as they aged, which emerged from the data analysis and illustrates for most, that they were grouped into three different categories. In group one, Paul,

Adam, Howard, William and Rupert were planning on retiring or had already left for retirement life away from the property. Some of them had succession plans in place and were in the process, or had trained children for providing continuity of their generational properties. In group two, Steven, James, Brian, Mark and Bruce had no immediate plans to retire as they aged and were continuing with farming activities and or nature conservation efforts. As well as having adapted to ageing, they were utilising outside labour and technology to help. Some of this group had diversified their land-use activities and were enjoying such things as the gentrified environments which they had created in retirement, for example Mike's expansive ornamental garden and lake created by him. In the third group, Steven, Brian, Mark, Mike and Adam had set up their land for some profitable economic activities as well as pursuing personal interests with the land including nature conservation initiatives.

Themes revealed in each of the three groups of participants were firstly the theme of familial continuity in group one. This theme linked to those participants, who had been focused as they aged, on succession planning for their property's familial continuance. In group two, participants had adapted and diversified their farm activities as they aged, in order to stay on, as they had such strong attachments to place and had no foreseeable plans to leave. Those views are echoed by Wiles et al. (2009) who suggest that attachment to place involves a delicate and constantly shifting balance between the social-emotional and the practical aspects of living in a particular place. Thirdly, in group three, participants were in harmony with one another in what they had actively done differently on their land. That action connected with the concept of 'active ageing' Stenner et al. (2011) which was accomplished in several ways by replacing the relationships, activities and roles of middle-age, which were lost, with new ones in order to maintain activities and life satisfaction.

One participant Trevor (see Table 6.1) who had sold his generational farm to outside interests had left completely, to retire to a small town nearby. Although he was still strongly attached emotionally to his old farm, after being more than ten years away, he remarked that he did return occasionally. He did this to reminisce about his old property by being there and assisting a community based land-care group with river catchment conservation activities. The ninth column shows one participant Bruce, who had realised that he sensed familial pressures to retire as he aged, but also felt the need to continue on and set things up properly for the next generation to come and take over before he departed. In the tenth column a small cluster of three participants indicated that they were content with ageing on their smaller properties where they had many interesting projects happening to occupy themselves with. Those included farm tourism for Paul, nature conservation for James, as well as heritage building restoration and ornamental garden pursuits for Mike.

When exploring participants' thoughts about what their plans were in relation to getting older, either for themselves or the property, most had already decided and had made long-term arrangements. Their plans had involved a wide range of ideas, including familial succession plans for the continuity of their generational property ownership. More recently some had become aware of new environmental

awareness trends taking place with nature conservation initiatives across rural New Zealand. They wanted to participate by playing an active part on their land as a result of a national 'green' concept occurring. Participants contemplating leaving completely to retire, generally desired moving only a short distance to nearby small towns with familiar environments, and social structures. This lessened the effects of adaption to relatively unfamiliar, new, living spaces that might have contrasted completely with their original, known, living and working environments. Retiring to nearby 'age friendly' towns with effective facilities, amenities and health services for ageing people helped reduce their increasing challenges faced with transport and distance. It was an obvious choice to make in such circumstances.

Many participants had expressed a strong desire for familial continuance of their property ownership and for current economic farming activities to be always maintained on their land. The majority of participants accepted some of the new farming methods and diversification of land-uses with new primary products being introduced, but not all. Some made strong statements about having the property remain in 'the family' for the future, or 'not selling the family silver' after they had left for retirement. Comments like that suggested attachment to place and having a sense of ownership about their properties had clearly intensified over time - both socially and emotionally. For example, Paul, in his late 60s, said he was going to stay on the farm for as long as he possibly could, before passing it down to family. Before doing that, he was making sure they were thoroughly trained and completely familiar with all of the essential farming skills, receiving as much of his farming knowledge as he could pass on, before he felt comfortable enough to move away. By planning and achieving a continuity strategy in terms of his preferred land-uses for successors to his place, Paul's actions gave him a sense of personal reassurance. That was a way of knowing it was going to be left in good hands for the future and the strategy he took was the coping mechanism that he needed, "before letting go of the place".

William, in his 90s, also wanted generational continuance of his property. He felt the local community would have preferred that to happen too from what he had heard and that had given him a sense of commitment and a social obligation to the people in the whole area he had retired to:

Well, I would be very disappointed if it sold outside the family. So long as everybody treats it as if they were caretaker of it for their time here, I think that is fine. If you went to the local town here, where there are dozens of people who have worked on the farm and feel passionate about it - those sorts of people would be distraught if the family sold it out of place.

Generational property succession plans made by some participants often assumed that their children, especially the male child, would naturally take over the ownership and running of the property once parents had stepped away. Providing that was what their children wanted to do, this assumption was

encouraged in a few cases, in those generational properties, where either sons or daughters were going to be the recipients of the farm's legacy. Whether sons or daughters took over, the timing of events was mostly decided at prearranged meetings with family members and also sometimes outside advisors. Howard said, "The challenge is to get the next generation comfortable and to know when to step away". He indicated that his time for retirement was getting close and as mentioned previously, he had plans for a new house by the sea near their farm which he and his wife were both keen to develop to live in for retirement purposes. Adam was also keen for his children to take over his farm when he retired, though he was possibly a little apprehensive about familial continuity and commented pragmatically, "It would be very nice to think that maybe, what we have done here will be interesting enough for them to want to continue".

Passing the property down to family was not always the situation with another small group of participants. Several of those participants saw property succession within family as possibly being an unwanted burden to hand over, which had similarities to the metaphor in Samuel Taylor Coleridge's poem 'The Rhyme of the Ancient Mariner' (1798) that it was akin to having 'an albatross around one's neck', so they preferred to sell up and share the financial dividend amongst family members. Another generational farmer Steven, in his late 50s, differed noticeably from many of the twelve participants. His main point of difference appeared to be his contemporary, 'new age' and holistic outlook of society's economic, political and social worlds within the global natural environment. He was focused purely on growing organic farm products on his property and as a pastime; protecting native aquatic life and riparian plants of a small meandering stream he had on his property. Steven mentioned that he did not expect his children to take over the property:

I've already got a manager on the farm, but if my children wanted to, I'd be into making a space, only if they wanted to. But I don't want the farm to be the thing they need to take over in their lives.

Mike was emotionally attached to his rural property and that attachment had become stronger over the twenty years he had been there. In terms of how he understood his property; he recognised it as more of a large, rambling, ornamental, gentrified garden space to share with likeminded people, and nature. He had no plans for familial succession at any time and was well prepared to see the property sell later. He spoke philosophically about the investment of time and money he had in the property, which illustrated that he clearly valued it in its present state. Also, it was for what had been achieved there physically in the past, rather than values in any economic sense:

You would like people to live here who loved it. One thing is, it seems, people don't buy things unless they value them. I would like this place to be bought by someone who values it, but who knows.

Similarly, James in his 70s planned on growing a lot older at his property and did not focus on any forms of productive agriculture at all, except for his home vegetable garden. There had been only a few minor setbacks for him whilst there, including naturally occurring lightning strike scrub fires, sporadic cases of unwanted introduced animal pests and invasive weeds that needed controlling. As he neared retirement he was passionate about the property's long-term environment protection and encouraging people to help him to restore its original native biodiversity. He mentioned he had put almost his whole life's work into restoring and protecting its native flora and fauna with great success. His personal thoughts about a legacy for the property were centered on hoping for the continuity of conservation and protection measures he had achieved there with native biodiversity. He had recognised his physical capabilities to work were in decline, as he aged and consequently, he wanted this conservation work to be continued by someone capable. James remarked, "I hope to be replaced one day by a more active young manager to carry on". He indicated that he might like to move away from the property before, "dropping dead there". James's comments spoke to the needs and considerations of several other participants in knowing when the right time to leave would occur, as they finally realised and accepted their declining physical capabilities. James's cheerful comment about uncertainty for any plan that he could predict for the property was, "who knows, I mean climate change is the big elephant in the room right now, who knows what will happen in the future?"

6.3 Meanings, values and continuity

Supporting Atchley's (1989) theory on continuity, many participants made choices in order to preserve various aspects of their life's working period into later life. They included forms of economic livelihoods which stemmed from getting pleasure from on-farm activities and the social life which accompanied this, or a sense of emotional attachment which also derived from these activities. As examples, William who had retired away from the farm, maintained his attachment by occasionally returning and giving enthusiastic on-site talks about his generational property's past and present. There he discussed his former property's history and New Zealand primary production farming topics with visiting agricultural science university student groups from overseas. Trevor, also recently retired and moved off his property, returned to his generational property occasionally to work voluntarily with the local land-care group, assisting with environmental restoration projects on and around the river catchment. Both examples of these continuations of physical and social associations with past attachments to place now give them each a sense of fulfilment. Nearly half of the participants were keen to continue productive farming activities while remaining on their properties along with small amounts of nature protection initiatives and had no immediate plans to leave. They emphasised that the thought of going away from their property after retiring and coping with challenges inevitably being faced through unfamiliarity in new social and physical environments was difficult.

Discussing Howard's difficulties he possibly might face later when he left his property for retirement, he commented about his adjusting to life in another place off the farm, "Personal challenges are probably going to be the biggest issue for me rather than any farm challenges".

Several participants displayed differing views about how they saw their future roles after retiring, some of which connected with Atchley's (1999) continuity theory. One was 'internal continuity' which is seen as the maintenance of consistent frameworks of personal goals, emotional resilience and personal agency. An example of this was where Rupert saw himself as a 'sounding board', for decisions being made with new generational owners of his old farm he had retired from. Also, he was now finding himself more involved with helping local community sports teams and retirement centre management. This aspect can be described as 'external continuity' which outlines the consistency over time in social roles, activities, living arrangements and relationships that make up a lifestyle. Another is, 'personal goals' which explain values individuals want to actualise as they develop. As an example, this was illustrated by Adam who had bought and developed his small horticultural property. He hoped in time it would be able to generate enough income to cover its costs and in the longer run provide a retirement income for himself and his wife. Commenting about personal goals concerning his property he stated,

So, there was this sort of idea, some of that is justification in hindsight, because you know, you don't always do things for nice neat tidy strategic reasons. But that is how we justify it.

Defining an ideal self and lifestyle which constitute the benchmarks for assessing results of adaptation is where another angle comes into play with 'adaptive capacity'. Atchley (1989) suggested that this is determined by the extent a person maintains morale whilst confronted with any form of discontinuity. Discontinuity in this sense is a relatively serious and potentially disruptive level of change, and adaptation to discontinuity generally requires conscious mobilisation of coping resources. A good example of this was when the economic viability of Paul's property was suddenly adversely affected by New Zealand's 1980s neo-liberal government policy changes, having outcomes which put his property into serious financial jeopardy. This threat was caused by the unexpected removal of all his government farming subsidies. That, coupled with his bank's mortgage rate increase, which Paul claimed, "Doubled virtually overnight" and to counter effects of those economic challenges said, "I went shearing around here for eight years to keep me on the farm". That highlighted his conscious mobilisation of coping resources and endeavours in order to carry on. A short time later to assist economically, Paul diversified his sheep property into some income generating farm tourism initiatives with shearing demonstrations and sheep dog displays.



Figure 6.2. North Canterbury multifunctional land-uses. Sheep and grapes. Photo: J. Knox

Some participants talked about strong attachments they had to their rural places, and social spaces which they said had also helped their well being. To understand this further, I drew upon some of Wiles et al. (2009) research into the well-being and sense of place experienced by older people as they had aged. The relationships older people had to their social and physical environments assisted them to 'age in place'. Wiles et al. (2009) argue that a sense of belonging or attachment to place, can help to maintain a sense of identity and well-being and it facilitates successful adjustments in old age. Also, older people are shown to have drawn meaning and security from the places in which they live, something which was evident from my participants' narratives.

Canadian rural research by Keating (2008) furthered a richer understanding of ageing in rural settings through comparisons of some similarities experienced by older people in those environments. The experiences of ageing in rural Canada bears some parallels to the physical environments and social contexts of my participants here in New Zealand. However, there were noticeable contrasts with how my participants here compared with older adults, who were living in places out in the vast prairies of Western Canada and how they interpreted their life stories. Essentially that was because by comparison, my participants from the South Island's rural areas had never faced any of the challenges associated with extreme remoteness that Canada experiences. Those challenges included faraway social isolation issues and any necessary travel having to be made across much extended distances for accessing health and amenity services.

Considering the interactions of older adults in the rural places, which shape their experiences Keating (2008) suggests rural communities incorporate many elements which can influence the lives of older adults. Those elements include climate, landscape, distance from familial networks, access to available services and community structures. Age factors, gender roles and social relationships were other issues that my participants spoke about during interviews. Clearly an enhanced understanding of rural places and processes of ageing requires thinking about people's relationships with the natural, human built, social and community settings in which they grow older. Consequently, examining how landowners construct their relationships with people and place in rural places, as they age, is important.

During interviews, participants were asked to think deeply about the relationships they had with their properties. Exploring physical and cognitive nuances of ageing and how any related challenges may have influenced land-use over time was part of examining participants' 'lived perspectives' of rural ageing. More than any of the other topics discussed during my interviews, questions connected with ageing and place generated the most, often emotional reactions from participants, particularly as they contemplated their present and future life situations. Their comments about attachments to, meanings, values, challenges of place and the nature of rural influences they had over time being significant for all of them as they aged in adapting to, or contemplating change in activities, livelihoods and landscapes.

After analysis, several key themes of shared commonalities emerged from all participants' interviews. These included, their considered thoughts and feelings about place attachment, challenges, expectations, plans, continuity, community embeddedness and personal memories.

6.4 Attachment to place.

The entire group of participants all expressed strong attachments to their land. Many expressed how the meaning and significance of properties to their identities had strengthened over time as they aged. For several, whose properties had been inherited, this attachment was strengthened by recognition of their roles now as landowners (and managers) within a history of familial association and occupation. James had recognised his place in wider personal histories and expressed how the relationship with his property had developed over time. Association with that place now was to such an extent that the property had become an integral part of his identity:

I can't imagine preferring to be anywhere else, so that is how much it means to me. My relationship to the property has grown deeper and deeper and I feel totally native here; more than anywhere else on earth. The relationship to it grows deeper because you have more familiarity with it and a longer history, personal history.

James' comments clearly demonstrated how his emotional connection to the property had strengthened as he aged. By expressing his attitude and emotions about having a feeling of a 'sense of place' with his property, suggested a strong personal relationship of belonging with a positive affective quality of place attachment (Wylie,2009). Brian also talked about the significance of his temporal association with place, mentioning how his personal attachment had increased with experiences of working the land and seeing over time the changes that had been made:

It has to the extent that I have become more attached to it. I suppose you could say and even more proud, I guess of what we have done here and more satisfied with what we have done here. So, I guess for those reasons, it has altered somewhat in the last ten or twenty years.

Familial attachment with histories of generational properties as they grew older was noticeable with several participants. For example, Howard commented "It has basically been my life and I suppose it was always a love relationship from the start". William's reason for taking over the generational property handed down to him was that he had just found himself in a familial inheritance situation he "was just born into". Describing some of his thoughts about what that all had meant:

Well I take it that, because it has been in the family for so long, we are a caretaker of the land for our thirty years that we were managing it. I think the ownership at times is a nuisance, to have its value going up that way, and you have to go and try to go from one generation to another.

Getting older had not altered Bruce's relationship with respect to his property he was still living on, as he had always been passionate about his on-farm activities, and still was. Again those feelings of Bruce do speak to Atchley's (1999) notion of continuity as being significant in older people's identity and sense of place as they aged. Bruce had experienced continued involvement with the property and saw that as a way of maintaining a familial and social responsibility towards his family and local community. This showed a way of having a degree of control over what goes on inside the property's boundaries. It also demonstrated a level of command and control over change, which added to a sense of wanting continuity. Bruce spoke about familial continuity and ownership:

The property means a responsibility because you definitely don't want it to go outside of the family probably. Ownership is really important, because I believe we can look after the land better than anyone else.

Aesthetic values of the landscape for almost all participants was found to have been a specific source of pleasure, an integral part of their lives and sometimes a source of personal identity. For example, Adam who was extremely enthusiastic about his new property he had shifted onto in retirement age. He described his personal appreciation for the visual aesthetic values of its landscape features and

sky above it. Of particular fascination for him were the long clouds formed by North West winds late in the year above his place, as illustrated in Figure 6.3. Adam was so inspired by these cloud shapes he had used images of them in his creative artwork on his horticultural produce marketing web site:

The landscape which I identify with strongly, and really enjoy, is now an important part of who we are, and what we are here. North West clouds - the shapes of the clouds are absolutely, fantastic. The formation of them and the way that responds to the landscape is interesting in and of itself. But the hot, dry Nor-West wind is a real bugger.



Figure 6.3. 'North-West Arch' evening clouds over North Canterbury foothills

Photo: J. Knox

Mike's strong personal and sometimes emotional attachment to his place truly meant a great deal to him, as well as the location which it was situated in. The landscape provided him with a strong sense of belonging, reassurance and security. What those particular attachments he recognised now meant to him were:

Immense amounts, my life is here now. This fits me like a glove, I really belong here. And of course, I have known it from my childhood. I think this is most important, it is bounded by hills and so you know exactly everyone in the locality. It must be different out on the plains where the plains just stretch away and away and away and there is no boundary for anything.

Mike not only indicates a long association with his land, but notes that his property's relative geographical location surrounded and protected by hills which he likes, had created a sense of community spirit in which people mostly knew one another. Mike suggested that unlike infinite landscapes such as plains, he prefers boundaries to live within, where things begin and end. That way he could see the extent of what he owns, which gave him a sense of secure place attachment. This identified with Wiles et al. (2008) study of well-being and attachment of older people in New Zealand which outlines that older people, in particular, have been shown to draw meaning and security from the places in which they live. Mike's experiences were echoed by several other participants as they expressed views about their place attachments. Those related to the aesthetic appreciation of the landscape, knowledge of the history of their property's occupation, as well as development and contribution by them to playing a part in a rural community. Many of those features provided them with a sense of belonging and helped with cohesion in their community. Mike said that his passionate connection to the land and local community had created a sense of personal vulnerability in the face of potential uncertainties. Those issues were associated with many important choices, strategies and changes he will have to make in adapting to ageing later in life in his remote environment.

Rupert also had strong emotional connections to the visual aesthetics and familial farming history of the landscape. He marvelled at and had a strong appreciation for his forebears and their historic accounts of endurance, hardship and success. Those hardships had been brought about by economic pressures and natural disasters such as droughts, floods, snow and even rabbit plagues. Rupert and his wife had recently retired nearby to a coastal township away from the inland generational property he was brought up on and farmed later. He commented when he does return to visit, "I get a real kick out of it every time I come back and see the shape of the hills". He later reminisced and spoke of his personal and emotional feelings in regards to the attachment he had made to his property over time:

I used to cry when I went off to boarding school and left those hills. And that is still with me now, I don't cry now. Yes, just the shape of the hills and the history and the fact that you have walked them and what they have done for our family. I place a high value on the aesthetics and the stories and the life we have lived amongst them.

This example of attachment to place and familial continuity expressed by Rupert highlights his strong personal attachments, which in turn had almost certainly led to him remaining in the local area in his retirement. That attachment had enabled him occasionally to return with ease to his previous property to enjoy, reminisce and appreciate his sense of place. These were feelings which still remained. The participants' narratives affirmed with Keating (2008) who argues an appreciation of the social and physical environment is an important component of ageing well in place. The research has confirmed 'A sense of belonging or attachment to place is believed to help maintain a sense of identity and well-being, as well as facilitating adjustments in old age' (Wiles et al., 2009:664). Emotional attachments

to place were significant in creating a sense of identity and a feeling of security in later life for all my participants

The overarching messages of participants' narratives about ageing in place, was their expression of a strong desire to have some form of continual physical or social involvement with their property, even after retirement. Supporting that view, what was evident with several participants was that retaining continuity of some sort of involvement with their properties was important. Living close to their old property also helped with returning for visits, in order to keep a watchful eye on the property and also helped in making them readily available to give advice to any following generational family members, who had taken over the farm. Most participants had positive outlooks for their futures and had planned for retirement, with less strenuous activities as they aged. As an example, Brian on his sheep and cattle property talked about his desire to stay on:

We want to keep the property for as long as we possibly can, and should our health be good, then we would stay here right almost until we die. We are finding that we can't and don't want to do the day to day farming anymore, so we have got in a young guy who manages our farm now and help him out when he needs a hand.

Patterns of continuity at various levels of connection to their property, and in many cases, nearby communities, were apparent with most participants. Examples included being called back as an advisor when asked for farming advice by their old property's new owners or management. Also, becoming involved in a local land-care group, or supporting local community sports clubs and charitable social organisations associated with the elderly. Another group of participants were keen to stay on their properties and had not really considered moving away as they aged. James at 73 years was one such person:

Well, I mean I am seventy-three years old now and I am still working very physically on the land and I am sure now that I am seventy three it won't be too long before I can't do some of the things I'm doing now. I'm noticing that already. But I will stay here for as long as I can

These examples of participants' actions are associated with continuity and adaption in ageing.

6.5 Challenges and expectations

Discussing future challenges, which influenced participants' decisions to stay or move off properties, as well as their own plans as they got older, provided a range of insights into the way they had contemplated options and managed choices as they aged. A few participants outlined expectations of themselves and others associated with ageing, as well as talked about any future management of their property that might happen. Some also expressed regrets about previous choices of land-use made over their time there and not having involved their spouse earlier with any decision-making for the running of their property. Conversations with participants about what lay ahead for them, revealed that many felt there were multiple challenges to come, including some uncertainty surrounding their future in where they would go and what they would do, in order to cope on a day-to-day basis.

'Active ageing' was something my participants were keen to do. Participants spoke of the need to their keep minds and bodies active in order to age well. Walker (2006) refers to 'active ageing' as a form of on-going involvement in activities ranging from social, economic and cultural, to daily exercise and routine activities of daily life. My participants reiterated this understanding of active ageing during interviews. For example, Paul later in his life, whilst still farming his property, had made a concerted effort to keep mentally active by learning to speak Spanish in his spare time from an Argentinean woman who lived on a farm nearby. With his newly learnt multi-language skill, he now goes over to Uruguay in South America on occasions to teach farmers in Spanish, about how to use sheep dogs for mustering sheep and cattle. Paul, who even takes two of his own sheep dogs all the way over there for this new teaching experience commented,

It's amazing, meeting other farmers in Uruguay who are just bewildered about what I could do with a dog and I had hundreds of people following me over there - literally hundreds.

For many participants keeping active meant, continuing to do some sort of activity associated with their property. As an example, Steven in his late sixties mentioned, "As I'm getting older, I just want to do it simpler - simpler and just less". Along with many other participants, he clearly was not wanting full 'disengagement' from his property, which Cumming et al. (1961) identified was the idea of 'old age' with people being in an inevitable period of withdrawal from roles and relationships. Supporting this idea, James at 73 years old had noticed maintaining physical levels of activities on his property had decreased over recent times. He saw that his contribution could continue by commenting, "It needed now not only to be the physical work". Consequentially, although still doing physical work to a lesser degree, he now spends more time instead, writing and doing natural history research on the native flora and fauna around his property:

I love doing it, and I just think that it is, that I like to disseminate knowledge, and I think, I can't praise myself,

but I think I do it reasonably well, so I get job satisfaction from that for sure.

A minority of participants as they aged had sought to diversify the economic activities on their property in other ways by utilising existing farm building structures. This was done in order to move their focus away from productive farming and to establish a range of profitable economic activities, which they would be able to manage and enjoy as they aged. That range of activities included farm stays, garden/farm experiences, special events in old farm buildings and for a few, weddings in the private family church on the property grounds. This was not only something to do in retirement, but it had given them the opportunity to involve their spouse. It also generated a sense of satisfaction for the continuity of familial obligations they felt they had with keeping the property in the family. At the same time, it had created an interest for their spouse to become involved in the day to day organisation and operation of on-farm activities than they might have previously had.

Participants stated there were numerous challenges to overcome by staying on their properties as they aged and a significant factor in that was the decline in their physical abilities, which had affected those most who had hilly properties. For example, Rupert's challenge, which he found by remaining on his mostly steep, hilly property was coming to terms with his own physical limitations that gradually increased as he aged, making it difficult for him to remain on his farm for much longer. As a result, he wanted to be a reasonable distance away from the every day-to-day work of running the family property. He has shifted away to his nearby coastal retreat house with his wife in retirement, which has given him a huge feeling of relief. However, even from there, he said was still keen to play a role as a sounding board for any of his former property's management decisions under the new ownership.

Several participants spoke about a whole range of ever increasing outside pressures they had been faced with. These included having to adhere continually to changing the way they managed their property under regional and central government requirements and regulations stipulated for landholders. Those outside bureaucratic controls were something that in the past had been virtually non-existent. Complying with rules and regulations, in a sense, was unsettling to long term autonomy for themselves and the land. Outside pressures including New Zealand's *Resource Management Act* (1991), could well have affected rural ageing for people on the land. Those pressures sometimes caused anxiety and uncertainty in relation to economic costing concerning what they did or could do with the land. They had once considered their land to be their own private domain to do whatever they liked with. When, how and why these types of outside controls or pressures happen with older people Keating (2008) suggests can be critically important to how people age.

As an example, Bruce reminisced vividly about past experiences on his large, remote generational property and coping with adverse weather situations, which brought with them, catastrophic snowstorms and floods during his tenure there. Beyond those natural disasters, as he had aged, he thought that the most

hindering and stressful mental challenges for him at the time, were all of the new regulatory compliances which occurred. He felt that these aspects had made it very difficult to enjoy the land as he had once when he was virtually, “a pioneer on that land”. Bruce has since moved off his property after leaving it to his children to run and he has retired close by, to a small rural town. He spoke about memories he has of his former property and recent challenges connected with land-use changes:

We didn't have to consult anybody to do things like bulldoze tracks. We never had to consult anybody doing that. Whereas today, you are required to have plans and resource consents and all that type of thing and with the fencing off land from waterways, and all that. I guess one of my challenges of remaining in place as I got older was how to manage the property with all those stricter environmental things being imposed on us.

Similarly, Rupert also resisted what he felt were external pressures from central government agencies and regional councils, who had suggested to him at various times, how to manage his property efficiently, in using methods that they deemed more efficient:

We have made great strides up until now, because in the last five or six years I have been able to let go and feel comfortable with the fact that sheep haven't got fly strike and that the bull is not over in the neighbour's place and those sorts of things that used to be a constant worry. Regarding the future, fundamentally we want to be left alone, as we think we have done a pretty good job for 100 years here. We would like to be given the courtesy of doing it for another 100 years without being interfered with by professors, bastards, and experts!

Rupert's concerns about increased bureaucracy interfering with his or his familial successor's farming methods and philosophy, is a trigger that initiates a sense of a reduced right/ability to make one's own choices. Active ageing, for example, is strongly linked to independence, interest in life, coping with challenges, by making the right decisions and keeping up with the world by keeping active and avoiding becoming passive Stenner (2011). According to the World Health Organisation (2002), the notion of independence is subtly different from that of autonomy, to the extent that it concerns a more objectively demonstrable capacity to perform certain necessary functions without the help of others. In Rupert's situation, this inference applied to what he considered rules and regulations being made up by “inexperienced young people straight out of university”. Those people were well outside of his established family, friends and community and by them giving directives, which curtailed his autonomy in running the farm as he liked, it was something he found he was not overly pleased with.

Howard's challenges had similarities with Rupert's too, as well as several other participants retiring from their familial land tenure situations. For example, they were all going to leave their property, or had plans to at some stage because of the realisation that they were getting too old to continue indefinitely. However, in doing this, they had struggled a little with the notion of letting go of their embedded sense of physical and emotional attachments to place. Howard, in his early 60s, had finally decided to leave his property for retirement nearby and was in the process of planning his next move into a new house that was still to be built. He said he had faced his two biggest challenges. Those were, initially, the final stepping away transition from the farm and prior to that, getting the next generation comfortable. Getting the next generation 'comfortable' had included sharing the farm's economic assets evenly to all of his children, both male and female. These issues highlighted his deep emotional attachment to place and an inherent, social obligation for familial continuity which earlier had been prescribed for him, namely the continuity of owning and running the generational historic property. Commenting on the inevitable changes Howard was expecting when he moved away from his property:

So, suddenly that is all going to change, that will be a challenge. Personal challenges to do with the family and us leaving are probably the biggest issues for me as I get older, rather than farm challenges.

The construct of familial continuity is in union with Atchley (1987) who suggests roles and familial relationships for most middle-aged people were those of maintaining relationships, especially with offspring, as a major goal. Indeed, next to being self-reliant, older people ranked maintaining their relationships as their highest goal. For their future, Rupert and his wife had purchased a nearby coastal property to retire to, as part of their "weaning off process", as he aptly described his slow transition period from farming to retirement. Importantly, although leaving, his strong attachment was such that he was concerned that continuance of the ethos of his generational farming methods and philosophies about economics were to be ongoing. Also, that his children later, when assuming tenure, were not going to be "interfered with, when running the farm", something he had the experience of during his time there through bureaucratic outsiders. With regards to his immediate future:

The challenge is that we live in an older homestead, and have reasonably big grounds and at some stage, in the future, the maintenance of this area will become too much for us. I don't know, there may be a time when we will want to move. So there is a process of weaning ourselves off from living here permanently.

A small cohort of participants, who wanted to stay on their properties, shared their realisation about physical ageing and overall declining of health, which had various ramifications for them. These challenges were often connected with living in remote rural localities and an important aspect faced was loss of continued access to services and amenities in towns, as they gradually lost the ability to

drive because of ageing impairments. This aspect of concern was important for Brian, who made the comment, “Being able to stay here for another twenty years is going to be a challenge - we’ve got great hopes for driverless cars”.

Collective sentiments about concerns arising as they aged were shared by many participants. Their mobility and independence in rural and often remote locations is identified by Carp (1988) that mobility does play a central role in the promotion of independence and well-being of older, rural adults, in that it is one of the primary means for meeting both life maintenance and higher order needs.

6.6 Community embeddedness

According to Scharf et al. (2005) active, older people believe that it is important to be engaged in their community for both personal and social reasons. They are fond of their community and want to contribute. Community involvement gives them a sense of accomplishment and a feeling of security. By investing their time and effort into some sort of community service, they believe they are making their community a better place to live. This view resonated with the participants who were either staying on their properties, or after having left, had planned to retire in the vicinity of nearby towns they were familiar with. They saw embeddedness in their local community as a critical part of ageing well in place and it helped with actively and passively participating in the community. Some areas of their involvement included: neighbourly socialising, contributing time to volunteer organisations such as local environment protection groups, being community-minded and contributing economically or physically somehow in whatever way they could help. Community involvement was viewed as very important in helping maintain a sense of place. The term ‘sense of place’ refers to the attitudes and feelings that individuals and groups hold regarding the geographical areas in which they live (Wylie, 2009).

Several participants appreciated some visits by individuals and educational field groups coming to their properties to learn about their unique land-use initiatives they had developed there. The visits had given participants an opportunity to meet and socially interact with visitors, which was something that Mark remarked about, “I enjoy that because I like sharing my knowledge with people about my trees and trying to encourage them to grow various things”. Steven had a local stream-care group visit on occasions to help participate with conservation and nature protection activities along the riparian margins of the stream that ran through his property. He found these visits were fascinating for him because interesting people visited and he commented “It was stimulating to have interesting people around really; I just like to have interesting people around”. For Steven, having visits like these had helped him overcome a sense of isolation which he admitted sometimes was experienced by being out on the farm on his own for long periods of time. Supporting that view, he also mentioned that he was quite envious of town people because he assumed they were not alone and were always socialising with other people in cities.

Although Trevor had left the generational farm to retire to a nearby town, he liked to return occasionally to his old, remote, rural property, which was now owned by overseas buyers and to help with the local community 'land-care' group. Such activity not only helped provide him with a sense of continuity, but also as he explained it was a contribution for him, because looking after the river and its catchment was, "important to do if you want to preserve the wildlife, especially birds, including, Banded Dotterels, Rye Bills and Black Fronted Terns". Trevor's action of continuity in this sense Atchley (1999) maintains is not just an objective outcome, but continuity is also often a highly desired experience.

Trevor's participation in his retirement with the local community's 'land-care' group relates to the 'activity theory of ageing'. Lemon et al. (1972) suggested the essence of that theory is that there is a positive relationship between activity and life satisfaction and the greater the role loss, the lower the life satisfaction. Trevor's participation with the land-care group also includes the taking up of new roles in retirement, which are still, though to a lesser degree, connected to his past..

William and Bruce, who currently had remained on their properties, both felt they had significant attachments to their local community and helped whenever possible. For example, Bruce had contributed financially and time-wise in several projects connected to tourism ventures in the region. His justification for that community assistance was, "if you don't have the values of the community at heart, then you get quite self-centred". Mike essentially had reduced the size of his small Highland cattle and sheep farm by leasing out small sections of land in order to make it a manageable, gentrified lifestyle block with a large pond, which he preferred to call a small lake. Mike felt a desire, as he aged, to contribute something to his local community for important social and recreational benefits. Describing his justification for that he stated,

I've got orchards and I have just got a cider press. I have made my own wine in the past from my own pears and if I may say so, the last couple of times it has been quite satisfactory. So, I think if there are hard times ahead, the only happiness we are going to get, apart from each other's company and a prayer is through alcohol. So, someone like me who has some skills in home-made alcohol production may be a valued member of the community. That is what we must think about getting into our old age, about fitting into a community and surviving.

Rupert on the other hand, looking back at what he had done, had some regrets about not being involved in the past with his community. He explained that where he lived locality-wise, a community had not really existed as he was situated between two small rural towns. So, as a consequence he felt he didn't connect directly to anyone or any community. He commented that instead he became involved in regional politics and memberships with national agricultural organisations:

Without sounding too pretentious or big-headed, my community involvement has sort of been at a higher level, being involved with regional politics and national farming related organisations. So, I haven't been involved, as perhaps I should have been, with the likes of a local rugby club and those sorts of very important day-to-day activities. But I sort of feel I have made my contribution at another level.

Rupert has since retired and is less involved with any of his former outside political interests or farm work on his property. The farm is continuing to operate with a younger family member, leaving him with a new role of being a 'sounding board' to helping make any farming land-use decisions, which may require his experienced agricultural wisdom and judgement. He still wants to stay in the area and has recently connected socially by volunteering his political knowledge and skills to the wider local rural communities by assisting on a nearby retirement village's management board. This new found community role for Rupert has enabled him to continue skills, interests and abilities he had, but in different contexts and through a different medium, which corresponds to Atchley's (1999) suggestion, that in adapting to ageing, many people adapt to lost activities by redistributing their energies among remaining ones.

This involvement gave Rupert a perfect opportunity to contribute something he considered worthwhile, as he had been unable to pursue other activities in the past because of his farming interests. Now he was 'actively ageing' for the good of the wider rural community, which he was born into. Maintaining continuity of lifestyle, relationships and personal values was also important for Rupert, as continuity was not just an objective outcome for him. It also appeared to have been a highly desired experience for him to have, gathering from my understanding of our discussion about strategies and tactics he had developed for adapting to retirement.

Many other participants also shared narratives in interviews about having had strong social and emotional senses of attachment to their local communities, which had become apparent through long-term connections with those places. This embedded connection had often served as a motivator to care in new ways for those places. That caring action Wiles et al. (2013) comments is that through care for place, people can assume new identities such as caretakers, guardians and advocates for the well-being of the people and places where they were ageing. This suggests that their connections to place, not only foster desires to care for places, but also links ageing peoples' identity to these places and enhances their sense of belonging.

6.7 Memories

Asking participants to think a little more deeply about their property in terms of their relationships to it in the past, evoked an interesting range of personal and collective reminiscences about life experiences. The episodes in their lives they talked about, exhibited some significant signs of place attachments, as they aged. Phillips et al. (2011) notes that for older people who are familiar with their areas, attachment is often conveyed through shared memories of events around particular places and buildings. Also, it was noticeable throughout my interviews with the twelve participants, how they really engaged with questions about meaningful landscapes for them whilst viewing either their own photographs or some of my photos of their collective environments. This particular examination using photo-elicitation techniques with participants was found to have prompted more sentimental narrative than with other methods of the interviewing process. These sentiments included expressions about personal, emotional attachments to visual aesthetics of their immediate and surrounding landscapes for eight participants. For example, the picturesque mountains of Central Otago, such as the Rock and Pillar Range (see Figure 6.4), held strong visual and sentimental values for Rupert, as it was close to where he had farmed.



Figure 6.4. Rock and Pillar Range - Maniototo - Central Otago

Photo: J. Knox

Several other participants felt a strong, familial attachment based on the generational history of the property they had been a part of. Some, particularly from the more remote and larger properties, had an emotional attachment as a result of the good times they had enjoyed and those bad times that they had

struggled with in order to survive. They remembered and recalled in conversation those moments, sometimes quite vividly. According to Parker (1995) he maintains that life stories are a product of reminiscing processes, which help individuals adapt to life's changes and that way they provide continuity. Also Atchley (1989) maintains as individuals make a transition from one stage to the next, encountering any changes in their lives, they attempt to order and interpret those changes by recalling their pasts. This provides an important sense of continuity and facilitates adaptation. Therefore, clearly a continuity approach is closely tied with memory processes and in order for any individual to maintain continuity, there must be a recall of what has come before.

Overall, there were noticeable themes which grouped participants together which surfaced during their reminiscences and past life-story recollections. Some of the themes included, initial property involvement or procurement, early familial experiences, the natural environment hazards and economic challenges, old farm machinery and heritage building sentiments, as well as rationale for any land-use changes. Participants spoke with passion and sincerity about attachments to their properties and those attachments or connections were expressed in strong emotional and symbolic terms. For example, "we are proud", "it means everything to me" and "I can't imagine being anywhere else". These types of feelings connect with Rowles (1983) who points out that older people have a high level of attachment to their homes and places. Their affinity to place across participants' lives reinforced the depth of feeling they had about what it truly meant to them, as it was quite apparent their places were their 'raison d'être' in life.



Figure 6.5. Early 1900s horse drawn dray used by Rupert's father in Otago. Photo: Rupert.

Personal recollections of place by participants from generational properties, contributed to their personal development, as they grew older in the family's lineage. Howard commented about his memories of early farm mechanisation and reasons for keeping special old farm machinery for nostalgic reasons, "When I was young, my grandfather had horses and carts and things like that". In turn, Trevor said that he had started his life in the horse transportation era with a horse-drawn gig as the only transport on his parent's farm. He even remembered the horse's name was 'Queenie', who amongst other tasks, took his family out on picnics. Adding to the horse drawn era reminiscence theme, Rupert had taken a picture of the old dray on his property Figure 6.5 during the photo-elicitation process he helped with. The significance of keeping that old dray on the farm was still valued by him:

The significance is that it has never been shifted by my family. That is the Toyota Land-cruiser of the 1910s. Everybody had a horse drawn dray. It was strapped to a horse, and it served every purpose, from carting hay, to getting the mail, to carting kids to school. That was the vehicle on the place. It was parked up there at some stage and it is really a relic of the past now. I am just a bit sad it wasn't kept under cover and looked after a bit better. But at the time like many old Toyotas are today, people don't realise the significance of them until probably it is a bit too late.

What Rupert inferred relates back historically to a continuity of the ethos of his generational farm management strategies and tactics, which included being frugal and sustainable. He described his ancestral heritage as coming from "canny Scottish stock", and now as a result he felt he had genetically adopted their frugal ways, right up until now and commented,

You don't just replace a vehicle or an implement because it is new and shiny. If it is functional and working, you keep it. So, this is a bit opposed to the consumer society of a 'throw away' society that the rest of civilisation is sort of adopting these days. We get a lot of pleasure out of repairing it, keeping it going and that is part, and parcel of economic sustainability.

Several participants at retirement age, who were now economically secure and doing less work as a result, or had even left their properties, talked about overcoming key personal challenges in their past. Some mentioned regrets about doing what they did and what they would have liked to have done, if they had their lives all over again. Memories about hardships and challenges faced by them were mostly linked to the extreme environmental disasters encountered and external political, economic pressures. These environmental disasters included snowstorms, flooding, fires, and rabbit plagues. The economic problems faced were caused mostly by the lifting of government farm subsidies in the 1980s.

Trevor's graphic memories of a natural catastrophe for him went back to November 1967, when his property was hit by a huge, unseasonal snowstorm:

The worst one hit us in 1967 in the middle of November, just as lambing had started in the back country. Everything was all under snow. But it wasn't the snow that did the damage, it was when it melted. Then there were floods everywhere and a lot of stock drowned, especially the lambs. It became easier later on to deal with those situations as we got better machinery like bulldozers and tractors.

This personal recollection illustrates important memories about Trevor's property which he still vividly retains in his thoughts from his past experiences there, despite having retired several years ago. It also contributed to a sense of his resilience and coping strategies which he undertook in the face of extreme natural disaster situations. Manzo (2003) suggests that place identity is the sense of self, which develops in relation to the environment around individuals and Wiles et al. (2009) comment that it is dependent on a person's close, often long-term interaction with the place. Those experiences that Mike recalled, indicated the strong, emotive bonds and attachments to that environment he must still have, both positive and negative. The reminiscence narratives from Trevor are in concert with Wiles et al. (2009) who suggest that these types of feelings expressed, commonly are a suggestion of intimate, personal and emotional relationships between self and place.

There were several other meaningful situations that some participants reminisced about. For example, Paul remembered that he lost over half his stock in a snowstorm in 1992 and later on, had another natural disaster when the river flooded out across his farm. When he started out farming on the property back in 1974, he had a hammer, a wire strainer and a one-hundred-dollar wool press. He remarked, "Everything had to be done by hand and it was all slog for years and years." William had regrets about running and managing his property all by himself in the early days. He felt now that his wife should have been more involved at the beginning, in the decision-making areas of farm management. That was because, "with her university science qualifications, she would have probably have had better ideas about the landscape than me, but only male decisions were made at the time". He thoughtfully added, "If I had it all over again, we should have involved a wider group of people in what we did".

Participants' quotes about past experiences and sentiments, as they adapt to ageing, demonstrated that in middle or later life, adults are drawn by the weight of past experiences to use continuity as a primary, adaptive strategy for dealing with changes associated with normal ageing (Atchley, 1989). He further suggests that positive and negative associations with past events can become moments of learning, resilience and adaptation, to such an extent that change builds upon and also has links to the person's past. Therefore, change is a part of the continuity process.

6.8 Familial independency and continuity

Most generational landholders in later parts of their occupancy, as they aged, made familial succession plans, free from the control of anyone else. They were arranged to economically and physically prepare their farms for a comfortable transition to the following generation. That gave them a feeling of security, knowing that the familial legacy was not going to be sold to outside interests and would continue successfully for generations to come. A strong sense of familial attachment was shown by several participants, including Bruce, whose whole family was involved with the running of the property. He emphasised this by stating, "Family, that is first priority, if you haven't got family you have got nothing". William also had strong familial attachments to his property's familial continuance and when asked what he would like to see happen in the future: "Well, I would be very disappointed if it sold outside of the family". William's comment suggested that he thought outsiders might possibly alter the continuum of what was taking place there in relation to the property's familial history and his preference was for it to remain within his family's recognised structure.

Attachment to their land and familial plans for its land-use necessitated some participants thinking pragmatically about the economic practicalities involved and the delicate, social aspects of land transition to other people. Some indicated they did not want the property forced upon their children, unless they really wanted it. Brian, who was very involved with his nature conservation initiatives, realised that his children all had different levels of interests in nature and farming. Also each child had financial needs to be met that differed according to their personalities. He felt that it was most probable that the property would be passed on to a selected family member or have one of them purchase it. He had realised, "Inevitably it's going to be sold and somebody else will take over". Adam understandably hoped that the unique land-uses that he had created could generate enough income for his children to take over. Supporting that sentiment he said, "It's very nice to think that maybe what we have done here will be interesting enough for them to want to continue".

6.9 Conclusion

Chapter six has discussed twelve participants' meanings and experiences of growing older, their attachment and relationship to properties, as well as local places. The analysis of all transcript data has enabled me to explore and outline the changing meanings and values being made by the participants to their physical, as well as social environments, as they aged. For example, the concept of 'attachment to place' was a key element of their life course perspectives. It made the decisions of leaving their property to live in another place challenging, given their strong physical, as well as social ties which they had made there. For many participants, lived experience on properties meant that they had spent the whole of their lives there. Outcomes from interviews showed several clusters of

participants clearly shared similar patterns and themes, evident in Table 6.1 of what it meant for them in the context of ageing. Some wanted to stay on to continue with some productive farming and to further diversify land-uses, which they derived personal fulfilment from, such as nature conservation activities. Others were more focused on preparations for familial continuity. A few participants were keen to retire, do less around the property and enjoy the surrounds they had created or indeed live close by to keep in touch. Some individuals were singular in their outlook and did not fit within any of the whole participant group's patterns of behaviour or rationale for their actions from any consequences faced by ageing. These individuals made decisions which were reflections of their personal philosophies and beliefs that had distinctive, personal, ethical and morally bound convictions for controlling whatever they did.

Results from my research, in relation to a selected spectrum of academic, scholarly theorists' literature, did confirm and further extend their theories and ideas. Evidence of one such cluster supporting this from Table 6.1, specifically Atchley's (1989) 'continuity theory', was where a large group had strategies and plans which maintained the continuity of their property's familial ties and economic farming methods. They were accomplishing this objective using tactics tied to past experiences of themselves and their social worlds. These aspects revealed most participants had strong attachments and meanings to their properties, close connections to their communities and they were seen as important in the role of their ageing in place (Wiles et al., 2011). This was highlighted in their interview responses and their sometimes emotional reminiscences of their descriptions of attachments to place and what that had meant to them across time.

The analysis of the research showed virtually all participants' adaptations and decisions were influenced through the discourse of their lives in some way or another by their rural, social and physical environmental constructs. This illustrates how an examination of people and place connections is essential to understanding ageing in place Keating (2008). The concept of 'active ageing' theory (Stenner et al., 2011) resonated with many participants' actions as they grew older. This was made up of a complex composite of physical, mental and social activities they were involved in or had planned to do, either actively or passively in the rural environment, as they aged. In sum, this research topic has revealed that the processes of rural ageing and associated land-uses by property owners, as they aged, were diverse. It was multi-faceted according to the timing of each participant's positions in life and dependent upon their sense of attachment to place, personal philosophies and beliefs followed, as well as familial continuity responsibilities that may have existed.



Figure 6.6. Sheep Country, Hakataramea - North Otago

Photo: J. Knox

Chapter Seven – Discussion

7.1 Introduction



Figure 7.1. Draft horses, now retired in Canterbury, are a symbol of agricultural nostalgia. They were once widely used across New Zealand from the 1860s as a key mode of assisting farmers to make rural land-use changes and help with heavy transportation. Photo: J. Knox

This qualitative study of twelve, older, rural land holders in three regions of the South Island aimed to explore how they may have changed any of their land-uses over time. It also examined personal motivations for their decisions and the actions taken to alter land-use. In addition, I investigated these twelve participants' perspectives about ageing and how they had intersected with choices and experiences in relation to their properties in recent years. I then considered how any salient points they discussed, connected to the literatures of Wiles et al. (2009) concerning attachment to place, as well as Atchley (1989) the continuity theory of normal ageing.

7.2 Key findings

My research demonstrated that all twelve landholders had been involved in a raft of diverse rural, economic and social activities to do with land-use. They ranged

from various types of productive land-uses, including sheep, cattle, deer, organic cropping and horticulture, to nature conservation initiatives associated with native bush and waterways' protection. Three noticeable themes emerged from my series of interviews and those were expressed by groups of participants, who shared commonalities predominantly associated with:

- Generational succession and continuity of land-use.
- Continuation of productive farming, as well as initiatives with restoration and conservation of New Zealand flora and fauna.
- Land-use diversification for special interests, active ageing and retirement.

7.3 Aspects of land-use change

It was found that land-uses varied according to how long participants had been associated with their property. Differences arose about what had been their aims and goals, as well as what were their differing outlooks on life, as they had aged. Generational property owners for example, apart from having taken an active interest in their property management, had also focused on familial continuity through legacy plans, which became more evident later during the time of their property occupancy. Choices made by those participants, who had adapted to all of the changes occurring around them as they grew older, connected with Atchley(1989) who suggests that in middle and later life adults were drawn by the weight of past experience to use continuity as a primary adaptive strategy for dealing with decisions about changes associated with normal ageing. A noticeable characteristic, of generational property owners, was their desire to maintain, improve and continue farming their land without making too many changes. Their strong attachments to place were informed in the context of long-term relationships with their social and physical environments (sometimes more than 50 years). Those connections Wiles et al. (2009) maintain, are developed when older people feel enthusiastic and positive about their places and this often showed high levels of attachment to their environments, which also intensified over time.

7.4 Land-use change rationale.

Several participants with generational properties had predecessors who had been involved with key initial phases of historic rural New Zealand land-use change trajectories (see Figure 2.1), which had begun in the 1860s. During interviews I had with them, most reminisced about personal life experiences and the changes to their land they and previous generations had made. Then, they discussed at considerable length what the future held for the next generation taking over. I was told that initially their pioneering relatives' productive farm activities, in many instances, had gradually expanded out into untouched natural areas, purely for economic objectives. They had taken the opportunity to do this expansion at the time through the availability of large tracts of affordable land, when there were

very few political constraints and sometimes even, being motivated to do so with political encouragement.

Environmental issues and natural hazards, such as droughts, as well as snowstorms and droughts affected nearly all participants who spoke at length about their experiences and how they coped or did not do so. Those participants taking over a generational farm suggested they had felt driven to keep changing their land-use by intensifying and later diversifying to comply with similar patterns to the national trajectories of land-use phases, (see Figure 2.1), which occurred at that time in New Zealand. For example, for those on larger generational properties, which had started out as pioneering sheep farms, they commented that the standard and accepted changes to diversification and intensification of land-use then, went from production of cattle, cropping, deer, dairying, forestry and lastly, to forms of farm tourism. Finally, when they had thought about retirement and before that eventuated, the participants had put a familial contingency plan in place ready for the next generation to take over the management and ownership of their property. Atchley (1989) notes that continuity of general patterns of thought, behaviour and relationships is usually the first strategy people attempt to use to achieve their goals or adapt to changing circumstances. This was evidenced in my participants' actions through their period of navigating through any issues, in the direction of retirement.

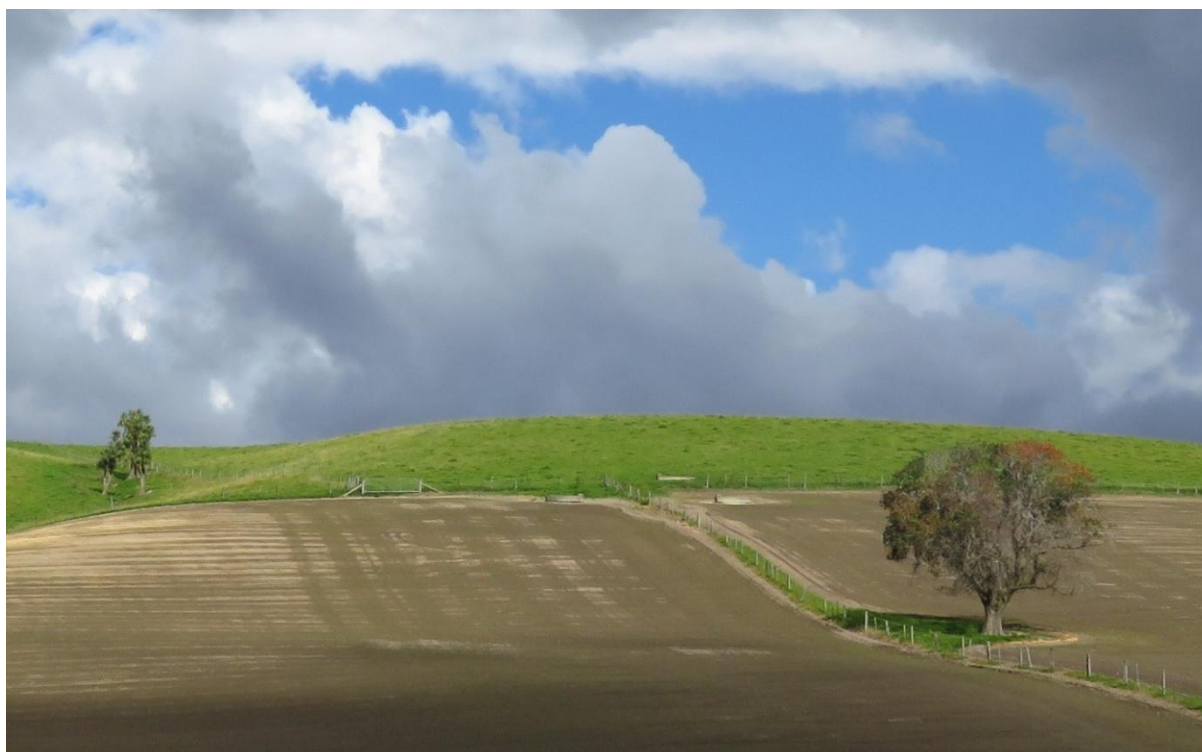


Figure 7.2. Land-use on a generational property near Cave - South Canterbury, newly ploughed and seeded with Italian Ryegrass, a suitable pasture for the deer, sheep and cattle being farmed there.

Photo: J. Knox

Another group of six participants, who had purchased properties in the last few decades, were involved with a range of engaging land-use activities. Those uses had often stemmed from their personal interests and were part of the reason why they had gone there in the first place. Some of the rural interests for them that they had initiated were: organic crops, exotic trees, olives, vineyards, truffles, landscaped flower gardens and nature conservation projects associated with selected native bush areas and streams. Although economic imperatives from land-use had been a driver for most, some participants who were retired or had other forms of income, were quite content to do what they were passionate about. For instance, for two participants, the visually aesthetic landscaping work they had created with ornamental gardens, ponds, sculptures and stonework was important for them. Those aspects of change they had made could well be described as a variation of 'gentrification' of the landscape, which Phillips (2005) indicated was a term coined by a British sociologist Ruth Glass in the 1960s. It had been used in a classical context with respect to urban neighbourhoods and homes, when she had observed at that time, the arrival of the 'gentry' and the accompanying social transition in several districts of England.



Figure 7.3. Gentrified grounds of a lifestyle property, with large duck pond and dry stone walls constructed by the property owner Mike for functional and aesthetic reasons. Photo: J. Knox

Questioning participants about what sort of land-use changes they had made on their properties, I found that the majority said that they had made land-use changes in order to increase their economic gains. Predominantly the changes made included diversification and intensification of agricultural production and later some nature conservation initiatives for personal reasons, with one exception being James. He was focused solely on the conservation and restoration of all the native biodiversity on his place. This was being accomplished by taking all the stock off the land, which once had been farmed extensively with sheep and cattle for approximately 100 years, thus allowing it to revert completely back to nature.

All the complexities and pace of these rural land-uses mentioned by participants connect with the contemporary, descriptive idea of rural land-use Holmes (2006) suggests is now conceptualised in parts of Australia as being a 'Multifunctional Landscape'. This term he suggests is propelled by three dominant driving forces, namely: agricultural overcapacity; the emergence of market driven amenity values; and growing awareness of sustainability and preservation issues. What became evident with most participants' nature conservation activities was that those had occurred in the latter periods of their involvement with their property. This was the phase when they were older and less involved in the daily routines of farm work.

Relationships participants had with their properties appeared to change as they got older and had moved away from economic agricultural productivity towards conserving what had originally been there. This included taking more of an interest in the natural environment and historic material structures, such as farm buildings and old agricultural machinery. Another interesting point about differing gender roles made known during the research, was the minimal level of involvement that several participants' spouses had, on a day-to-day basis, with decision-making regarding their property's overall operation. As a consequence, several spouses had created income-generating streams of their own accord. Those initiatives sometimes capitalised on some of their prior skills and academic knowledge, before coming to the property, which were associated with hospitality, catering, landscaping and environmental protection. Further research to examine the gender balance in rural decision-making and land-use changes is necessary.



Figure 7.4. Several spouses of property owners had developed farm tourism initiatives with extensive landscaped gardens and areas of hospitality that generated an income-stream as well as creating an opportunity for them to utilise skills that they had prior to moving onto the farm.

Photo: J. Knox

7.5 Place attachment and continuity

In addition to in-depth conversations with participants to find out more about their properties, significant aspects came to light from the group about considerations they may have made for familial continuity and legacy plans for their establishments. Not surprisingly, as individuals, they all held differing expectations of what they would like to happen when the time came to retire. For example, Brian, Steven and Adam thought it would be satisfying if a member of the family took over the ownership and running of their property after they retired. They also felt that they did not want their properties to become a burden on their children if they had other plans or careers in mind. Mike wanted whoever took over his property to be a person who loved it for what was there in the landscape. James preferred to have someone he thought, who would continue with the ongoing nature conservation and preservation activities occurring there, when he departed. An area for future research about the impacts of ageing in connection to nature, Freeman et al. (2019) have commented that it would be very valuable to explore whether positive nature experiences in the lives of older people have helped towards creating a better, more fulfilling old age.

Personal aspects about attachments to place had varied meanings for all of the participants when they described deep feelings they had for their properties and what those emotions had meant to them. They spoke openly, sometimes

emotionally, about their feelings and although they were separate from one another, it appeared they all shared similar rural life discourse experiences during the time period of the last 50 to 75 years that they had lived through. I found that smaller or larger sizes of property ownership were never interpreted by participants as being better or worse, in terms of retaining ownership or passing it on. My participants' notion about their connections to place went beyond just their property; something that Wiles et al. (2009) suggest is that place is more than a physical location or container in which events unfold. Rather, place could be thought of as a dynamic process invested with integrated physical, social, emotional and symbolic aspects, which interact on a range of different scales

My participants' conversations were intriguing when we discussed what they considered visually important and significant points of interest for them when recording photographs of their properties. I found several patterns emerged with the types of subject matter they had focused on. Those features of interest in their photos often had similarities with features in other participants' photographs. Several took photos of old farm machinery and buildings which were once used by their generational predecessors and had been kept for nostalgic reasons. Most took photographs of favourite views of their environments or even cloud patterns above their property and special sunrises. Photos also prompted different and sometimes emotional responses about some of the images they displayed. Their comments about these further supported the idea of their strong emotional and physical attachments to place. Participants choosing what to photograph, clearly highlighted aspects, which also had intrinsic value for them on the land. This demonstrated the value placed on environments and the effective bond between people and the landscapes, which they create, inhabit, manipulate, conserve, visit and imagine. It was apparent that for this group of older, rural people, emotional attachments to the physical aesthetics they appreciated in their natural and/or farmed landscape was very strong. These landscapes held many types of attachments to place for them that might differ in extent and significance, something which could be investigated with further research.



Figure 7.5. High Country Sheep. Rangitata - Canterbury.

Photo J. Knox

7.6 Research reflections

The initial literature research revealed the minimal amount of academic material about perceptions and actions of rural adults in New Zealand. In itself this was a justification for exploratory study. This aspect also suggests that there are opportunities to carry out further research in this area, which could add or contradict what is already known.

Several participants made a point of expressing how pleased they were that someone was actually coming out to their property and finally, taking an interest in them. They found being given the opportunity to talk about their landscapes was a valuable, reflective experience. Some of the personal matters they raised were comments about the situations that they were confronted with by geographic isolation and distance from towns, as well as a lack of people to socialise with. Often those solitary existences in New Zealand terms, of working alone on properties, which had been passed onto them, had caused them to reflect on their position. Some participants felt that their working lives on the property had been constrained by the imperative for successive generations to farm the land. This meant that participants had not always done so by choice and felt enormous pressure to succeed. This was quite different to several other participants who had purchased their property either for its enjoyable lifestyle, or philosophical and personal interest reasons.

7.7 Summary

Synthesising of the material from the twelve participant interview transcripts, as well as the photo elicitation imagery has proved to be a fascinating, worthwhile experience for me. With respect to my participants, ageing landholders located in rural parts of the South Island, I have discovered the deep passion that these people have for their properties, as well as their carefully considered rationales and motivations for a wide range of land-use changes that they have made, or are planning to do. There were diverse, sometimes very personal and emotional responses given by participants, when talking about their future considerations on retiring away from their property or continuing to stay on because of the various physical and social attachments they had to their properties.

This study of a small, yet diverse group of older rural landholders' lives and their land-uses has provided fresh insights into the motivations and experiences of rural landowners. It was clear that there were many challenges my participants faced through social, political and environmental forces that had affected them and their land-use decisions. A strong sense of attachment to place and positive personal outlooks, were traits which underpinned and helped in formulating many of their decisions that they had made regarding their land-uses and potentially also, their retirement from working the land. A sense of belonging and attachment to place also helped participants maintain a sense of identity and wellbeing.

7.8 Conclusion

This research has demonstrated the complexity of values and meanings that older land owners hold in relation to their land and how these have changed over time. Where land-uses have been altered over time, this has been in response to economic, political and environmental factors. In reflecting on participant's affinity with place and landscape, this research has also revealed the significance of place attachment in processes of decision making, especially with regards to decisions about remaining on or leaving properties and diversifying land-uses.



Figure 7.6. Lavender fields established over dry tussock grassland at Lake Pukaki for income-generating farm tourism opportunities and supplying cosmetic companies with lavender oil.

Photo: J. Knox

Chapter Eight – Conclusion



Figure 8.1. Yellow Canola seed fields and arable mixed farming - Fairlie. Photo: J. Knox

8.1 Introduction

This thesis has involved interviews and photo elicitation with twelve rural land holders in three regions of the South Island, in order to learn about their situations regarding connections to properties, the reasons for any land-use changes made and personal notions of ageing in a rural context. It also set out to gain a deeper understanding about the personal values, meanings and feelings of attachment to place that participants held about their environments, as well as any challenges they had in remaining or leaving as they aged.

8.2 Implications of my findings

My analysis of land-use changes revealed three different categories within my participant groupings whose trajectories did not fully align with Molloy's (1980) New Zealand land-use change phase diagram (Figure 2.1). Several important conclusions were made from some of my initial findings. These were, with two groups of participants tracking in different directions, an issue to be faced at some point in the future, is could they successfully sustain themselves in terms of not following the mainstream trajectory of current land-use if they wanted to. Time scales have become important for several of those participants, who have been on

their property for several generations. A recent twenty year encounter with dairy farming may not be a significant trend for them. I ascertained from my interview data that the idea of being a good farmer in the 1970s and 1980s was one that played into the stereotype, by using market signals and accepting subsidies, as well as using mechanical and chemical technologies to generate more sheep, crops and cattle. That was seen as the right thing to do, until they may have been exposed financially and then faced financial concerns. Several matters which acted as disrupters to continuity of all forms of land-use in participants' environments were related to outside political pressures, natural hazards (snow, droughts and floods) and changing markets. These were difficult, at any time, to navigate around and often they had dire consequences for land holders, materially and socially.



Figure 8.2. Intensified land-use at Omarama, with irrigation enabling increased stock numbers and a way to overcome adverse drought possibilities. Photo: J. Knox

Another finding in relation to land-use reflected on how participants had initially obtained their properties and this appeared to have made them do things differently. For example, generational owners, who had inherited their property, tended to continue with land-use traditions and had carried out some diversification and intensification activities based around economic objectives. Another group were those who had purchased their properties and did things which interested them that did not always include economic outcomes, but focused more on visual aesthetics of the landscape appreciation, nature conservation and enjoying a rural lifestyle. These features have all added to

variations in rural land-uses currently occurring across the landscape. Owning land does not always necessitate using it for economic advantage, as my participants clearly showed. A noticeable land-use change by older generational land holders was the inclination for some of them to engage in nature conservation and preservation initiatives in the latter part of their property tenures. That suggested that they may have accumulated enough capital and wanted to do something for the betterment and protection of nature, as they neared retirement. In other instances, they were following new, green trends occurring globally, which helped them to socialise with like-minded people in their wider community, as well as nature based groups. As society's mind-set has shifted and people are becoming more aware of farming's adverse polluting effects on rivers and waterways, some people may reach a point of reevaluating what is important now and setting things right. Increased reflexivity, which comes from growing older and the recognition it is not all about profit, but giving back by caring for the environment or showing good stewardship, were possibly drivers for their changes in the direction of nature conservation.

With respect to ageing, what has come through very clearly in terms of findings is the strong affinity all of the land owners, particularly those who had been there a long time, had with their land and its features. That also is an attribute because Atchley (1999) points out that we actually age better in place because we have those aspects that continue on from life phases. Participants had a really deep affective connection to their places, which in itself made it challenging to even think about retiring away from their properties. For those participants who had left their properties materially and gone to live somewhere else, their strong sense of place attachment had helped them adjust in some cases, or had made it more difficult for them. Perhaps, when people decided to leave and found that move away was challenging, what may have helped with the transition in terms of them being resilient, was their ability to talk about the landscapes they have come from. Bringing memories with them like photographs, paintings and artefacts were some things that helped them through that 'transition of place' period for adjusting to new dwellings and spaces. Continued connections to their properties through keeping informed about how their children or new owners were developing their land, as well as nature conservation activities they became involved with close to their old property's area, all helped them adjust too. People have been known to draw meaning and security for the places in which they have lived from these activities (Wiles et al., 2008). I developed from my perspective, a visual sense of what held a special meaning for participants on their property. It was like a picture-postcard or calendar photograph, of a man alone on his horse with dogs and sheep, amongst the tussock-covered hills and snow-capped mountains - a sense of being at one with a loved environment.

I found that the methods of interviewing by voice recording and photo-elicitation became moments for people not just to reminisce, but actively reflect on the conditions that informed their decisions at various points in time. Despite those decisions not always being economic, they were always a cultural decision to some extent and mention was often made about ensuring their family security with a succession plan or legacy, which could be passed on. Qualitative interviewing

was helpful in drawing points out. Participants were also able to digress from the point in question (many did) and speak openly about their thoughts and not just the actions they took. At times, during interviews, some became quite emotional when discussing their life discourse and their deep feelings about attachment to place.

Something I uncovered from that aspect was that there was more than just an emphasis on economic objectives for land-use change. It included other considerations, regarding cultural beliefs, what was happening in participants' families, personal ecological beliefs, as well as political imperatives and regulations. Photo elicitation proved to be extraordinarily worthwhile, with all participants who became engrossed when speaking to their images taken. Every picture told a story and these images held and identified important visual illustrations of their lives.



Figure 8.3. Images similar to the environment depicted in this image in the High Country, featuring Lake Alexandrina with surrounding tussock-covered landscapes near Tekapo, held many meanings and memories for property owners. Photo: J. Knox

Significant emotion was attached to participants' responses when talking about pragmatic decisions and evaluations of life courses. They were very sincere in what they spoke about. Sometimes, they were cautious about how they described a particular sense of themselves. Perhaps this is something to reflect upon in interviewing rural land owners about various aspects over the course of their lifetime. Investigating the intersections between the economic and the personal and how these aspects influenced significant decisions or changes in livelihood, could be beneficial.

Participants clearly saw different intrinsic values, which the land had for them. Some saw it as a legacy being handed down that they, in turn, would hand down for familial continuity or for every New Zealander to enjoy in perpetuity. Others saw it as historically significant from perspectives of Māori history and likened their presence as stewards or guardians, in order to preserve their land for the future and reinstate it. By returning the land to its original condition, they reasoned that the environment would then reflect what Māori would have seen when they first came to New Zealand. Others saw the land as a viable economic unit to use and some surrounded themselves with an aesthetically pleasing environment to enjoy. Some participants sought to create an economic unit with their land, but at the same time worked in harmony and balance with the environment, to produce and replenish the land rather than purely strip it of its natural resources.

Several issues came to light through the analysis of interviews that I had not anticipated. One of these was related to familial continuity on generational properties and another was the important role of spouses. One participant felt he had been given the generational farm whether he wanted it or not and as a result had missed out on many enjoyable things he would have liked to have done during his earlier years. He commented that he was not going to put pressure on his children to take over the farm and to have it “like an albatross around their necks” for that very reason. Some others said, if they had their time all over again they would have involved their spouses more in the property’s day-to-day management, which originally had been a very patriarchal domain. They knew their spouses had the capabilities and education to be involved in farm management, yet mostly saw their role and purpose as being involved solely with contributions to domestic work and raising children. However, having a conscience about the past roles meant that they were now giving their spouses all the opportunities they could, to do what they wanted to on the properties from a more enlightened, positive viewpoint about gender balance, as they aged and retired together.

An interesting pattern was revealed in terms of any succession plans landholders had for their properties. These patterns clustered participants into three groups (see Table 6.1) There were those who wanted familial continuity, others who had no plans to retire from their present ongoing land-use activities and some who accepted the property was to be sold in due course, hoping that it might be sold to someone who would value the land and appreciate it, yet accepting this might not be the case.

8.3 Concluding comments

Though this thesis has uncovered some important connections between landowners and their environments and actions as they age, there is so much more which might be researched. For example, researching how deep attachments to place in rural areas are constructed through the intersection of cultural and economic practice and landscape, might contribute to understandings of place attachment. It might also be worthwhile exploring the multiple factors which contribute to moving off or staying on one's property, in one's later years, informing knowledge of life-course transitions. This thesis also revealed the value of listening to stories of the connections between people and places. All my participants were appreciative of my request to meet with them on their properties and understood that their lives were viewed as valuable and worthwhile. They readily shared their stories, their emotions and their experiences, thereby revealing the value of personal insights into rural land-owners' decisions about place over time.



Figure 8.4. A 35 metre tall giant Totara tree which still stands on the eastern flanks of the Canterbury Plains because it is now protected. The Hinterland areas of the plains were virtually stripped of native forests from partial burning by Māori approximately 700 years ago and almost completely cleared during the expansion phase of agriculture from the 1850s, by pioneering European rural settlers. At 1000 years old, it was growing here before humans arrived in New Zealand. This tree now remains as a testament to small fragments of land with native vegetation, which have survived and continue unchanged since colonisation.

Photo: J. Knox

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Older Rural Landholders and Land-Use Change in the South Island

APPENDIX A: PARTICIPANT INFORMATION SHEET

Who am I?

Hello, my name is John Knox. I am an extramural student at Massey University studying towards a Masters of Philosophy in Geography. My academic supervisors for the qualitative research thesis I am doing are: Associate Professor Juliana Mansvelt and Professor Mike Roche, both of the School of People, Environment and Planning, Palmerston North.

What my research is about?

It is about examining how, why, and when older South Island rural landholders are making land-use changes on their properties. The research will explore the motivations, drivers, and responses to any changes to the social, environmental as well as historical aspects of their landholdings. I am interested in the ways in which rural landholders shape the environments in which they live and how rural contexts in turn, shape the lives of older people.

How can you help?

As a rural landholder, I would like to invite you to participate in a semi structured interview of approximately 60 minutes.

The interview will be at a location of your choice; this can be in your home, on the land, or other places such as a nearby town in a cafe or community centre, or out in the countryside somewhere. Interviews will be voice recorded so that they can be transcribed after the interview. You have the right to request that the voice recorder be turned off at any point during the interview. Prior to the interview I would also like to invite you to take several photographs with a digital camera or phone (I can provide a simple camera if need be) of things you feel are important or significant for you in the landscape. I would appreciate talking about the meanings of the images in these photos during our interview.

What will happen to the information you provide?

The data from interviews will be transcribed, analysed and then used for writing my thesis. Only my supervisors and I will have access to the interview transcripts. While portions of transcripts may be reproduced in my thesis, you will not be identified by name, as I will use pseudonyms. The interview data will be stored securely and the audio recordings will be destroyed at the end of the research. Your permission will be sought prior to using any of your photographs in my thesis.

Your Rights:

You are under no obligation to accept this invitation.

If you decide to participate, you have the right to:

- Decline to answer any particular question;
- Withdraw from the study at any point prior to or during the interview;
- Ask any questions about the study at any time during participation;
- Provide information on the understanding that your name will not be used;
- Be given access to a summary of the project findings when it is concluded;
- Ask for the recorder to be turned off at any time during the interview;
- Take photographs only if you would like to have your images discussed.

Thank you for taking the time to read this information sheet. As I discussed on the phone last year, I would very much appreciate to have the opportunity to talk with you and hope to be in touch soon to arrange a suitable time to meet.

Please contact me by phone ([REDACTED]) or email using the contact details below.

John Knox

[REDACTED]
[REDACTED]
[REDACTED]

Phone: [REDACTED]

Mobile [REDACTED]

Email: [REDACTED]

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This project has been evaluated by peer review and judged to be low risk. Consequently it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Dr Brian Finch, Director (Research Ethics), email humanethics@massey.ac.nz.

Older Rural Landholders and Land-Use Change in the South Island

APPENDIX B: PARTICIPANT CONSENT FORM

I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.

I agree to participate in this study under the conditions set out in the Information Sheet.

I agree/do not agree to the interview being sound recorded.

I agree/do not agree to taking photographs for this study (I understand separate consent will be sought for any that are intended for reproduction in this thesis)

Signature:

Date:

Full Name - printed

APPENDIX C: PARTICIPANT INTERVIEW QUESTIONS

Can you tell me a bit about yourself and the history of the property please?

- How long have you been associated with it? And how do you become associated with it?
- And in what roles?(owner, manger, etc, dwelling on the property as well)

Has the land use on your property changed during your association with it?

- What changes can you identify?
- When did these happen?
- What were the reasons for these changes?
- What was your role during these changes? (eg financed, did on-property work themselves, etc)

Can we think a little more deeply about your relationship to this property?

- What motivates your land-use decisions?
- What does this property/land mean to you? (eg identity, belonging, contribution, sense of continuity legacy, etc)
- Do you feel you need to attempt to preserve and maintain past activities and structures here?
- What values do you place on this landscape? (if not covered by last question)

The photographs you have taken, can we discuss those images?

- Why do you feel the things in these images are significant or important for you in the landscape?
- What does this show and what does that mean to you?
- Why did you take this one?

Now lastly a few questions related to growing older:

- Has your relationship to the property altered as you have aged?
- Has growing older impacted on your land-use decisions? How? And in What Way?
- What are your plans for the future? (their own and in relationship to what they might do on the property)
- Are there any challenges of remaining in this place for you? What are they? And how might you respond?

